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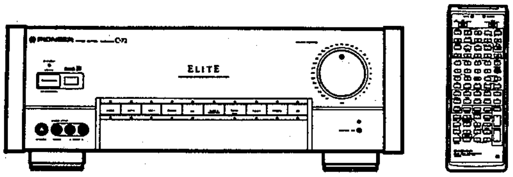
The future of sound and vision.

Service Manual



ORDER NO.
ARP2106

STEREO CONTROL AMPLIFIER

C-72
C-73

MODELS C-72 AND C-73 HAVE FOLLOWING VERSIONS:

Type	Applicable model		Power requirement	Destination
	C-72	C-73		
KU/CA	○	–	AC120V only	U.S.A. and Canada
SD	○	–	AC110V, 120V – 127V, 220V, 240V (Switchable)	Kingdom of Saudi Arabia and General market
HEZ	–	○	AC220V, 240V (Switchable) *	West Germany
HB	–	○	AC220V, 240V (Switchable) *	United Kingdom

* Change the connection of the power transformer lead wire.

- **This manual is applicable to the C-72/KU/CA, SD, C-73/HEZ and HB types.**
- **As to the C-72/SD type, refer to page 44.**
- **As to the C-73/HB type, refer to page 72.**

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SEV AUG. 1990 Printed in Japan

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SAFETY INFORMATION

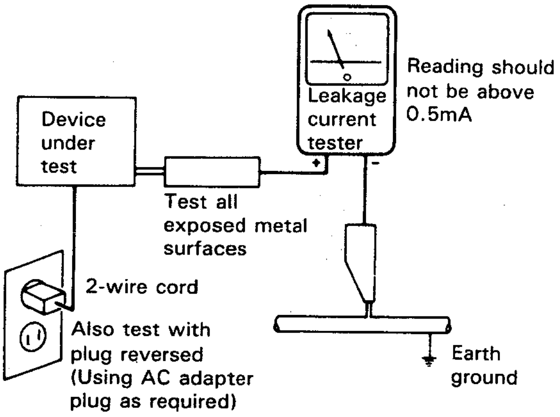
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Leakage current tester
Reading should not be above 0.5mA
Device under test
+
-
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

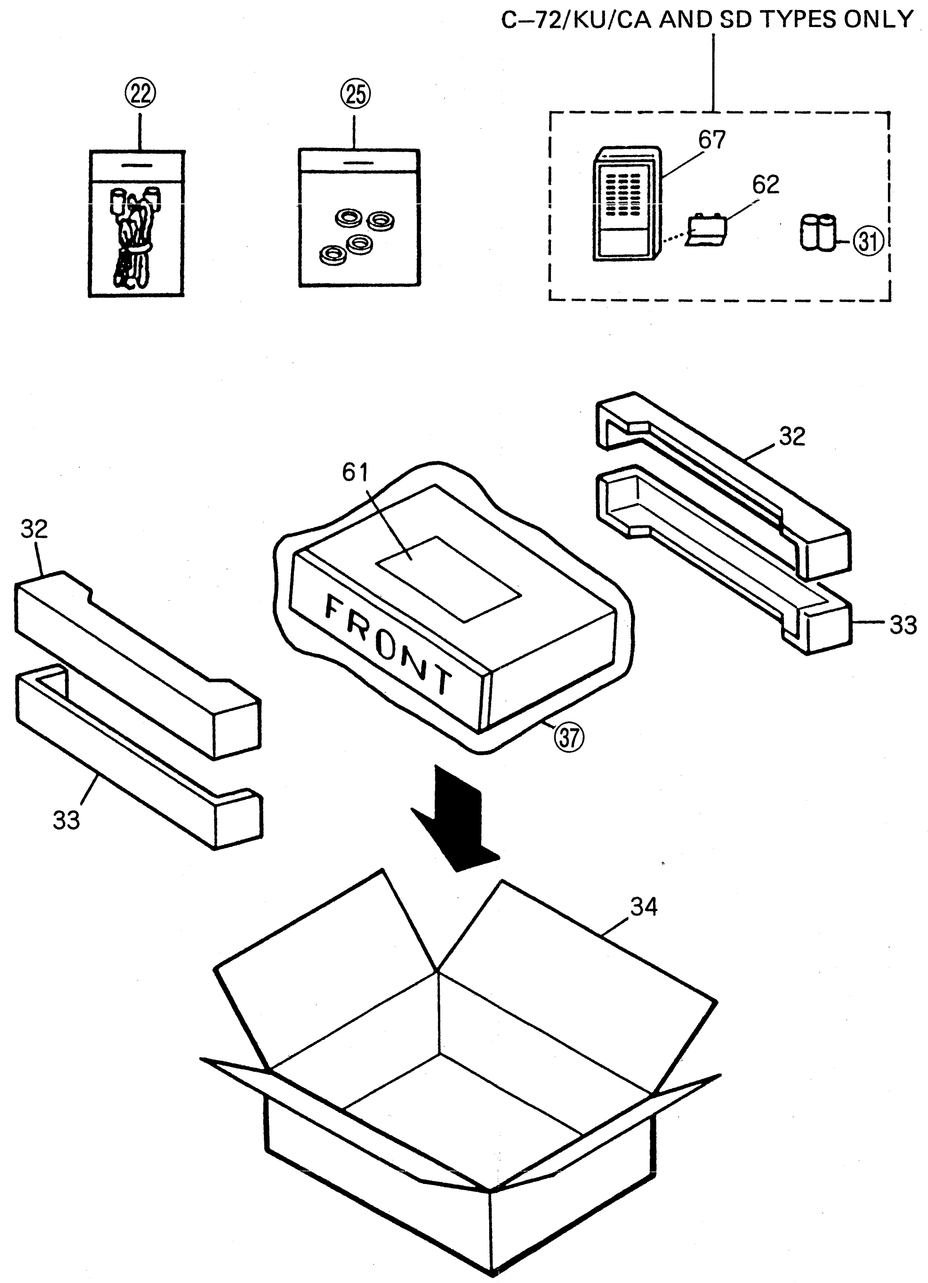
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

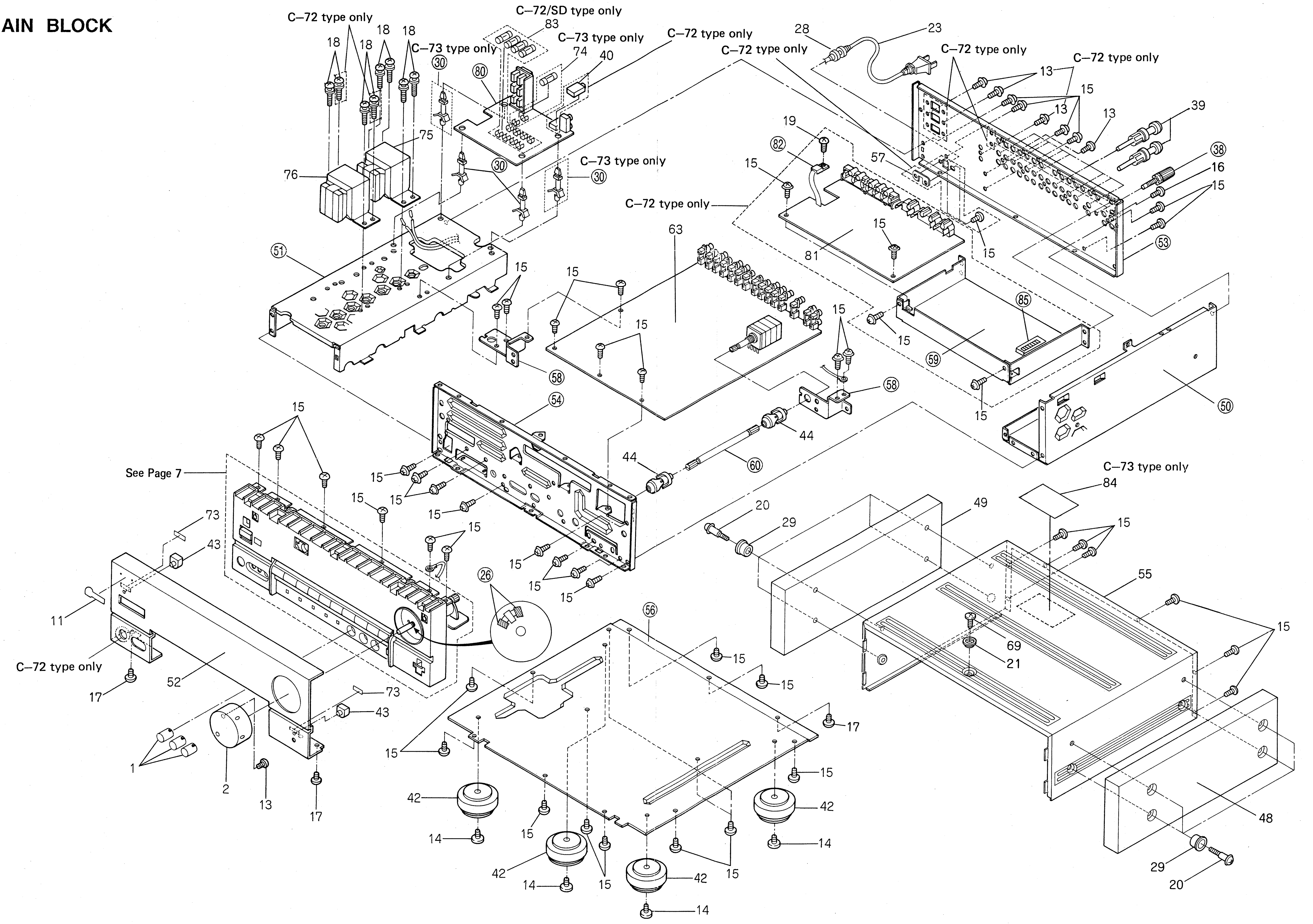
MEMO

2. EXPLODED VIEWS, PACKING AND PARTS LIST (FOR C-72/KU/CA AND C-73/HEZ TYPES)

2.1 PACKING


C–72/KU/CA AND SD TYPES ONLY
㉒
㉕
67
62
㉛
32
61
32
FRONT
33
33
㊲
34

2.2 MAIN BLOCK


C–72 type only
18
18
18
18
C–73 type only
C–72/SD type only
83
C–73 type only
74
40
C–72 type only
C–72 type only
28
23
C–72 type only
C–72 type only
13
15
13
13
39
(38)
16
15
(53)
(30)
(80)
75
76
(30)
C–73 type only
(30)
19
(82)
15
57
C–72 type only
63
15
81
15
(51)
15
15
15
15
(85)
(59)
15
15
(58)
(58)
15
(50)
(54)
44
44
(60)
15
See Page 7
15
15
15
15
15
15
15
15
15
73
43
11
C–72 type only
17
52
(26)
20
29
49
C–73 type only
84
15
55
15
(56)
15
15
69
21
17
73
43
1
2
13
17
15
15
42
14
15
42
14
15
42
14
15
42
14
15
48
29
20

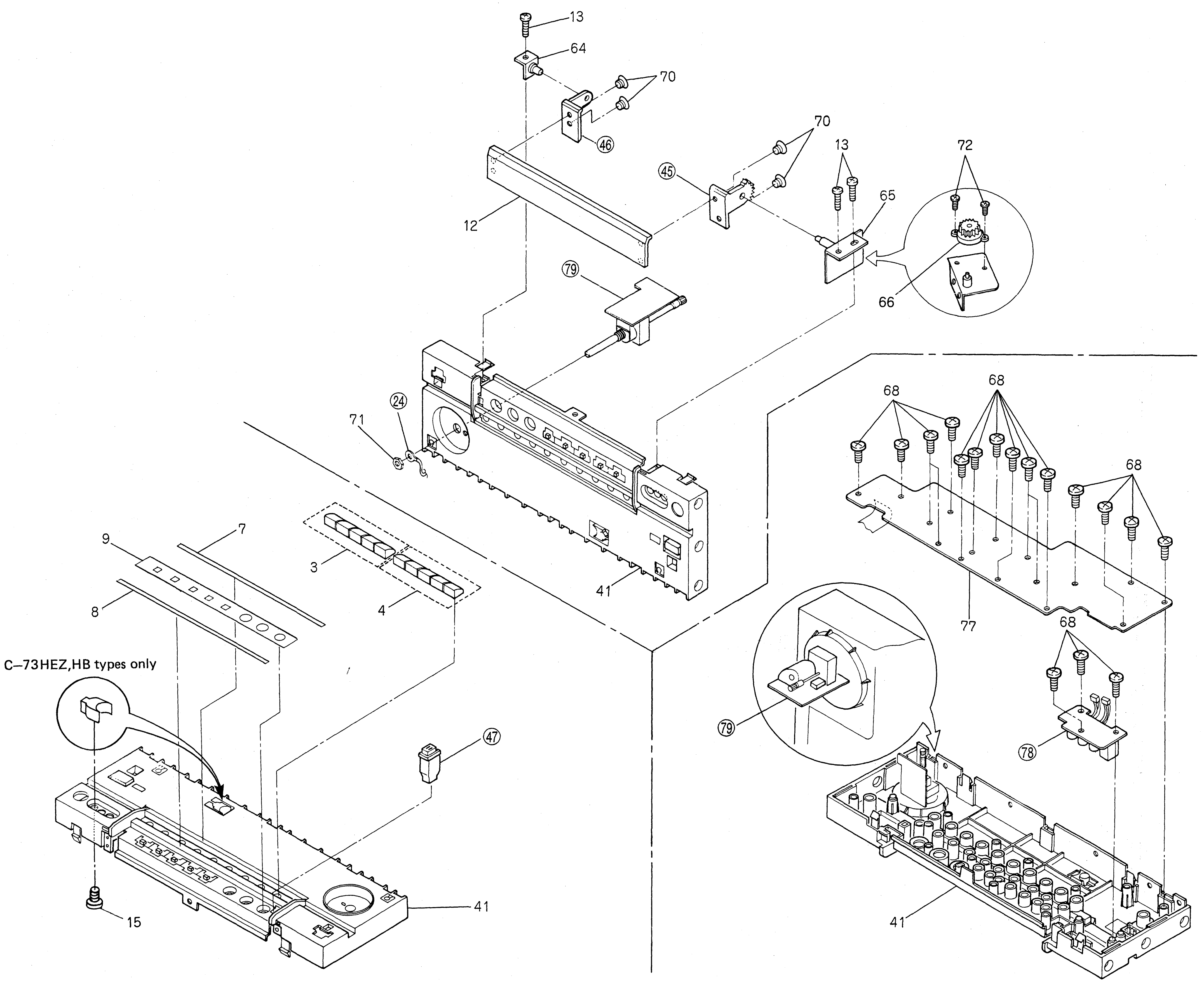
2.3 FRONT BLOCK

A

B

C

D


13
64
70
㊻
70
㊺
13
65
72
12
(79)
66
68
68
㉔
71
68
7
9
3
8
4
41
77
68
C–73HEZ,HB types only
㊼
(79)
(78)
41
15
41

A

B

C

D

NOTES:
- *Parts*
- *The ⚠*
factor
tion.
- *Parts*
than

2.4 I

Mark.

⚠

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.4 PARTS LIST OF C-72/KU/CA

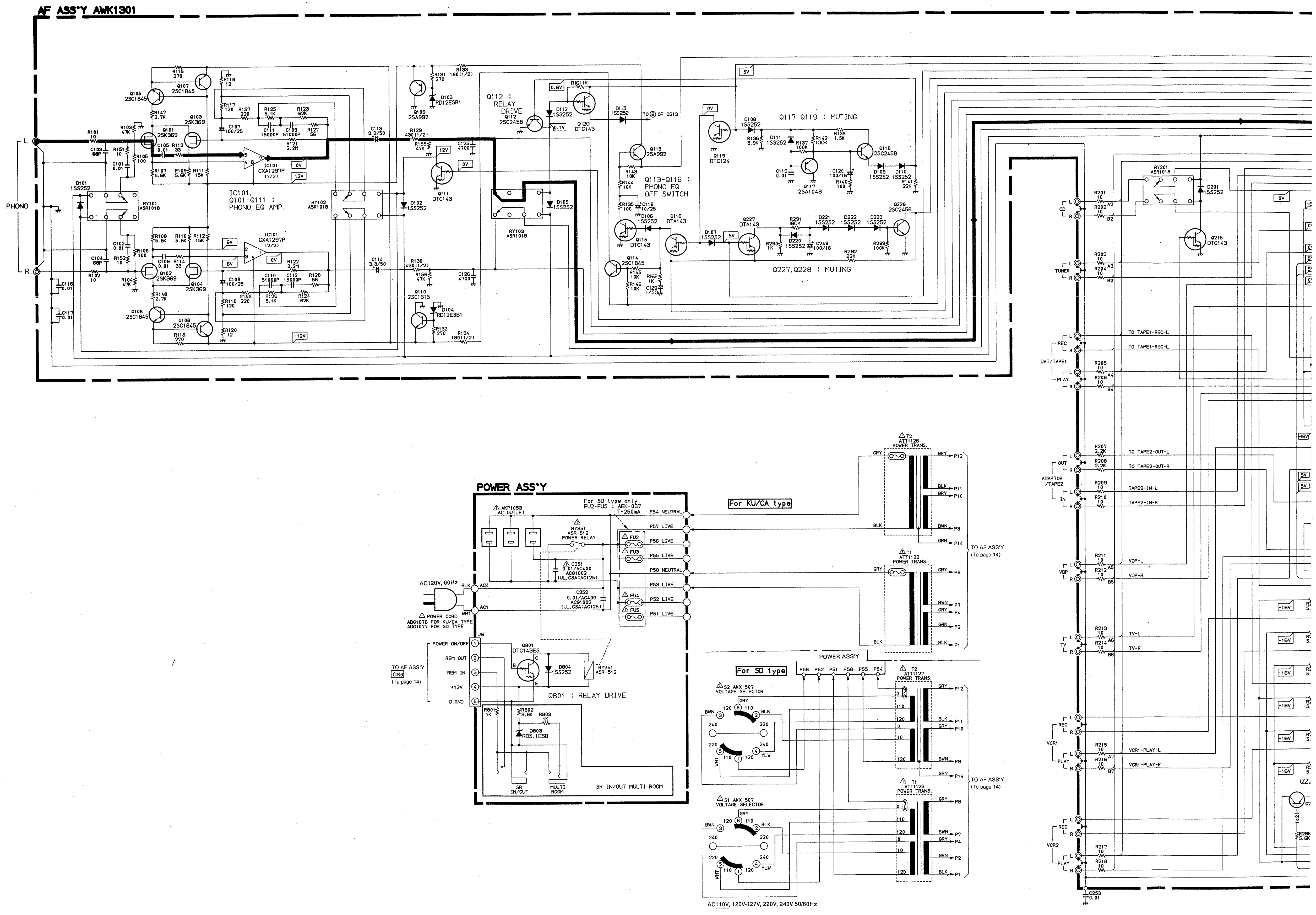
Mark.	No.	Description	Parts No.
	1	ROTARY KNOB	AAB1052
	2	ROTARY KNOB L	AAB1199
	3	KNOB	AAD1824
	4	KNOB	AAD1825
	5	---------------	
	6	---------------	
	7	PVC SHEET A	AAK2086
	8	PVC SHEET B	AAK2087
	9	PVC SHEET C	AAK2089
	10	---------------	
	11	NAME PLATE (METAL)	AAM1001
	12	DOOR PANEL	AAN1222
	13	SCREW	ABA-298
	14	SCREW (STEEL)	ABA1004
	15	SCREW (STEEL)	ABA1011
	16	SCREW (STEEL)	ABA1047
	17	SCREW (STEEL)	ABA1048
	18	SCREW	ABA1052
	19	SCREW	ABA1054
	20	SCREW (STEEL)	ABA1086
	21	WASHER	ABE1009
	22	PLUG CORD	
⚠	23	AC POWER CORD	ADG1076
	24	GROUND LEAD	
	25	SPACER SET	
	26	CUSHION SPACER	
	27	---------------	
	28	---------------	
	29	WOOD COLOR	AEC1165
	30	PCB SPACER	
	31	DRY CELL	
	32	STYROL PROTECTOR	AHA1003
	33	STYROL PROTECTOR	AHA1004
	34	PACKING CASE	AHD1927
	35	---------------	
	36	---------------	
	37	PACKING SHEET	
	38	TERMINAL SCREW	
	39	SHORT PIN PLUG	AKM-050
	40	JACK	AKN1020
	41	PANEL BASE ASS'Y	AMB1682
	42	FOOT ASS'Y	AMR1159
	43	INDICATING LENS	AMR1160
	44	JOINT	AMR1178
	45	HINGE L	
	46	HINGE R ASS'Y	
	47	MAGNETIC LATCH	
	48	SIDE BOARD R	AMS1049
	49	SIDE BOARD L	AMS1050
	50	RIGHT FRAME	
	51	TRANS. FRAME	
	52	FRONT PANEL	ANB1414
	53	REAR PANEL	
	54	PANEL STAY	
	55	METAL BONNET	ANE1255
	56	BOTTOM PLATE	
	57	AC CORD SPACER	ANG1153
	58	VOLUME HOLDER	
	59	VIDEO HOLDER	
	60	SHAFT	
	61	OPERATING INSTRUCTIONS (ENGLISH)	ARB1268
	62	BATTERY COVER	AZH1035
	63	AF ASS'Y	AWK1301
	64	SHAFT HOLDER ASS'Y R	AWL1053
	65	SHAFT HOLDER ASS'Y L	AWL1054
	66	DAMPER	AXA1010
	67	REMOTE CONTROL UNIT (CU-C001)	AXD1171
	68	SCREW	BBZ26P080FMC
	69	SCREW	BBZ40P080FZK
	70	SCREW	CMZ30P040FZK
	71	NUT	NK90FCU
	72	SCREW	PBZ20P040FZK
	73	ADHESIVE TAPE	ZTABS-5
	74	---------------	
⚠	75	T1 POWER TRANSFORMER	ATT1122
⚠	76	T2 POWER TRANSFORMER	ATT1126
	77	CONTROL ASS'Y	AWZ2898
	78	FRONT INPUT ASS'Y	
	79	VOLUME DRIVE ASS'Y	
	80	POWER ASS'Y	
	81	VIDEO ASS'Y	AWZ2900
	82	REGULATOR ASS'Y	
⚠	83	FU2,3,4,5 FUSE (T250mA) (SD type only)	AEK-037
	84	---------------	
	85	BARRIER	

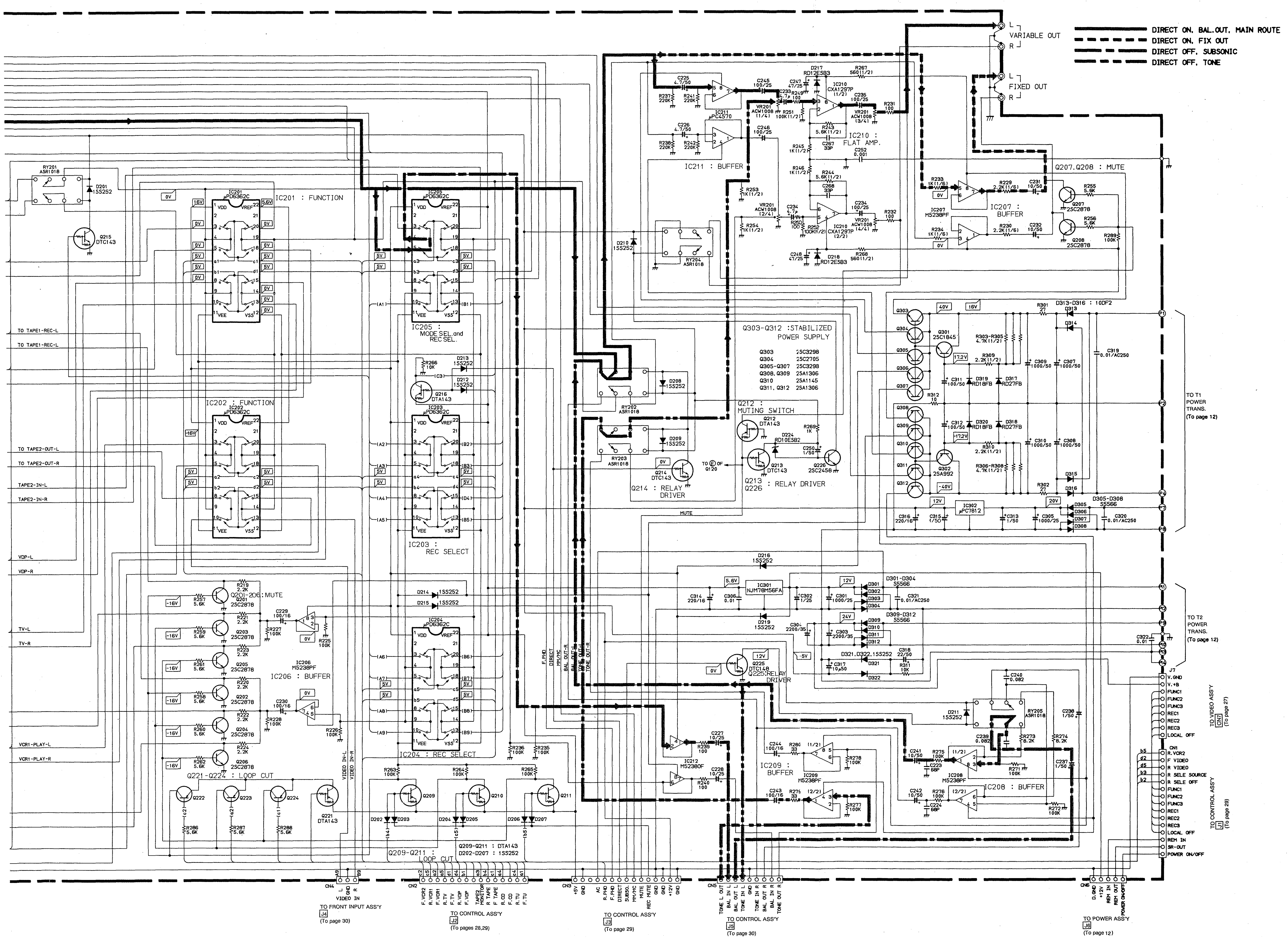
2.5 PARTS LIST OF C-73/HEZ

Mark.	No.	Description	Parts No.
	1	ROTARY KNOB	AAB1052
	2	ROTARY KNOB L	AAB1199
	3	KNOB	AAD1828
	4	KNOB	AAD1825
	5	---------------	
	6	---------------	
	7	PVC SHEET A	AAK2086
	8	PVC SHEET B	AAK2088
	9	PVC SHEET C	AAK2090
	10	---------------	
	11	NAME PLATE (METAL)	AAM1001
	12	DOOR PANEL	AAN1222
	13	SCREW	ABA-298
	14	SCREW (STEEL)	ABA1004
	15	SCREW (STEEL)	ABA1011
	16	SCREW (STEEL)	ABA1047
	17	SCREW (STEEL)	ABA1048
	18	SCREW	ABA1052
	19	---------------	
	20	SCREW (STEEL)	ABA1086
	21	WASHER	ABE1009
	22	PLUG CORD	
⚠	23	AC POWER CORD	ADG1036
	24	GROUND LEAD	
	25	SPACER SET	
	26	CUSHION SPACER	
	27	--------------	
	28	STRAIN RELIEF	AEC-882
	29	WOOD COLOR	AEC1165
	30	PCB SPACER	
	31	---------------	
	32	STYROL PROTECTOR	AHA1003
	33	STYROL PROTECTOR	AHA1004
	34	PACKING CASE	AHD1928
	35	---------------	
	36	---------------	
	37	PACKING SHEET	
	38	TERMINAL SCREW	
	39	SHORT PIN PLUG	AKM-050
	40	---------------	
	41	PANEL BASE ASS'Y	AMB1683
	42	FOOT ASS'Y	AMR1159
	43	INDICATING LENS	AMR1160
	44	JOINT	AMR1178
	45	HINGE L	
	46	HINGE R ASS'Y	
	47	MAGNETIC LATCH	
	48	SIDE BOARD R	AMS1049
	49	SIDE BOARD L	AMS1050
	50	RIGHT FRAME	
	51	TRANS. FRAME	
	52	FRONT PANEL	ANB1413
	53	REAR PANEL	
	54	PANEL STAY	
	55	METAL BONNET	ANE1255
	56	BOTTOM PLATE	
	57	---------------	
	58	VOLUME HOLDER	
	59	---------------	
	60	SHAFT	
	61	OPERATING INSTRUCTIONS (ENGLISH/GERMAN/FRENCH/ITALIAN/SPANISH/DUTCH/PORTUGUESE/SWEDISH)	ARE1167
	62	---------------	
	63	AF ASS'Y	AWK1302
	64	SHAFT HOLDER ASS'Y R	AWL1053
	65	SHAFT HOLDER ASS'Y L	AWL1054
	66	DAMPER	AXA1010
	67	---------------	
	68	SCREW	BBZ26P080FMC
	69	SCREW	BBZ40P080FZK
	70	SCREW	CMZ30P040FZK
	71	NUT	NK90FCU
	72	SCREW	PBZ20P040FZK
	73	ADHESIVE TAPE	ZTABS-5
⚠	74	FU1 FUSE (T500mA)	AEK-401
⚠	75	T1 POWER TRANSFORMER	ATT1124
⚠	76	T2 POWER TRANSFORMER	ATT1128
	77	CONTROL ASS'Y	AWZ2899
	78	FRONT INPUT ASS'Y	
	79	VOLUME DRIVE ASS'Y	
	80	POWER ASS'Y	
	81	---------------	
	82	---------------	
	83	---------------	
	84	CAUTION SHEET	AAX1431
	85	---------------	

3. FOR C-72/KU/CA TYPE

3.1 SCHEMATIC DIAGRAM AND P.C. BOARDS CONNECTION DIAGRAM


AF ASS'Y AWK1301
PHONO
L
R
IC101, Q101-Q111 : PHONO EQ AMP.
IC101 CXA1297P (1/2)
IC101 CXA1297P (2/2)
RY101 ASR1018
RY102 ASR1018
RY103 ASR1018
Q112 : RELAY DRIVE
Q112 2SC2458
Q120 DTC143
Q113 2SA992
Q113-Q116 : PHONO EQ OFF SWITCH
Q114 2SC1845
Q115 DTC143
Q116 DTA143
Q117-Q119 : MUTING
Q118 2SC2458
Q117 2SA1048
Q119 DTC124
Q227 DTA143
Q227, Q228 : MUTING
Q228 2SC2458
Q215 DTC143
RY201 ASR1018
D201 1SS252
Q101 2SK369
Q102 2SK369
Q103 2SK369
Q104 2SK369
Q105 2SC1845
Q106 2SC1845
Q107 2SC1845
Q108 2SC1845
Q109 2SA992
Q110 2SC1815
Q111 DTC143
D103 RD12ESB1
D104 RD12ESB1
TO Ⓑ OF Q213
5V
0V
6V
12V
-12V
0.6V
0.1V
CD
TUNER
DAT/TAPE1
REC
PLAY
ADAPTOR /TAPE2
OUT
IN
VDP
TV
VCR1
VCR2
TO TAPE1-REC-L
TO TAPE1-REC-R
TO TAPE2-OUT-L
TO TAPE2-OUT-R
TAPE2-IN-L
TAPE2-IN-R
VDP-L
VDP-R
TV-L
TV-R
VCR1-PLAY-L
VCR1-PLAY-R
-16V
C253 0.01
POWER ASS'Y
AKP1053 AC OUTLET
For SD type only FU2-FU5 : AEK-037 T-250mA
RY351 ASR-512 POWER RELAY
C351 0.01/AC400 ACG1002 (UL,CSA:AC125)
C352 0.01/AC400 ACG1002 (UL,CSA:AC125)
AC120V, 60Hz
POWER CORD ADG1076 FOR KU/CA TYPE ADG1077 FOR SD TYPE
P54 NEUTRAL
P57 LIVE
P56 LIVE
P55 LIVE
P58 NEUTRAL
P53 LIVE
P52 LIVE
P51 LIVE
J6
POWER ON/OFF
REM OUT
REM IN
+12V
D.GND
TO AF ASS'Y CN6 (To page 14)
Q801 DTC143ES
D804 1SS252
RY351 ASR-512
Q801 : RELAY DRIVE
D803 RD5.1ESB
SR IN/OUT
MULTI ROOM
SR IN/OUT MULTI ROOM
For KU/CA type
T2 ATT1126 POWER TRANS.
T1 ATT1122 POWER TRANS.
TO AF ASS'Y (To page 14)
For SD type
POWER ASS'Y
T2 ATT1127 POWER TRANS.
T1 ATT1123 POWER TRANS.
S2 AKX-507 VOLTAGE SELECTOR
S1 AKX-507 VOLTAGE SELECTOR
GRY
BLK
BWN
GRN
WHT
YLW
P12
P11
P10
P9
P14
P8
P7
P4
P2
P1
AC110V, 120V-127V, 220V, 240V 50/60Hz


DIRECT ON, BAL.OUT, MAIN ROUTE
DIRECT ON, FIX OUT
DIRECT OFF, SUBSONIC
DIRECT OFF, TONE
VARIABLE OUT
FIXED OUT
IC201 : FUNCTION
IC202 : FUNCTION
IC205 : MODE SEL.and REC SEL.
IC203 : REC SELECT
IC204 : REC SELECT
IC206 : BUFFER
Q201-206: MUTE
Q221-Q224 : LOOP CUT
Q209-Q211 : LOOP CUT
Q209-Q211 : DTA143
D202-D207 : 1SS252
IC211 : BUFFER
IC210 : FLAT AMP.
IC207 : BUFFER
Q207,Q208 : MUTE
Q303-Q312 :STABILIZED POWER SUPPLY
Q212 : MUTING SWITCH
Q214 : RELAY DRIVER
Q213 Q226 : RELAY DRIVER
Q225:RELAY DRIVER
IC209 : BUFFER
IC208 : BUFFER
TO T1 POWER TRANS. (To page 12)
TO T2 POWER TRANS. (To page 12)
TO VIDEO ASS'Y CN7 (To page 27)
TO CONTROL ASS'Y J1 (To page 29)
TO FRONT INPUT ASS'Y J4 (To page 30)
TO CONTROL ASS'Y J2 (To pages 28,29)
TO CONTROL ASS'Y J3 (To page 29)
TO CONTROL ASS'Y J5 (To page 30)
TO POWER ASS'Y J6 (To page 12)
TO TAPE1-REC-L
TO TAPE1-REC-L
TO TAPE2-OUT-L
TO TAPE2-OUT-R
TAPE2-IN-L
TAPE2-IN-R
VDP-L
VDP-R
TV-L
TV-R
VCR1-PLAY-L
VCR1-PLAY-R

1. **RESISTORS:**
   Indicated in Ω, 1/8, 1/4W, ±5% tolerance unless otherwise noted K; kΩ, M; MΩ, (F); ±1%, (G); ±2%, (K); ±10%, (M); ±20% tolerance.

2. **CAPACITORS:**
   Indicated in capacity (μF) / voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.

3. **VOLTAGE CURRENT:**

⏢	;	DC voltage (V) at no input signal. Value in ( ) is DC voltage at rated power.
⇦mA	;	DC current at no input signal.

4. **OTHERS**
   - ←; Signal route.
   - ⊘ ; Adjusting point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
   - ※ marked capacitor and resistor have parts number.
   - This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. **SWITCHES (The underline indicates the switch position)**

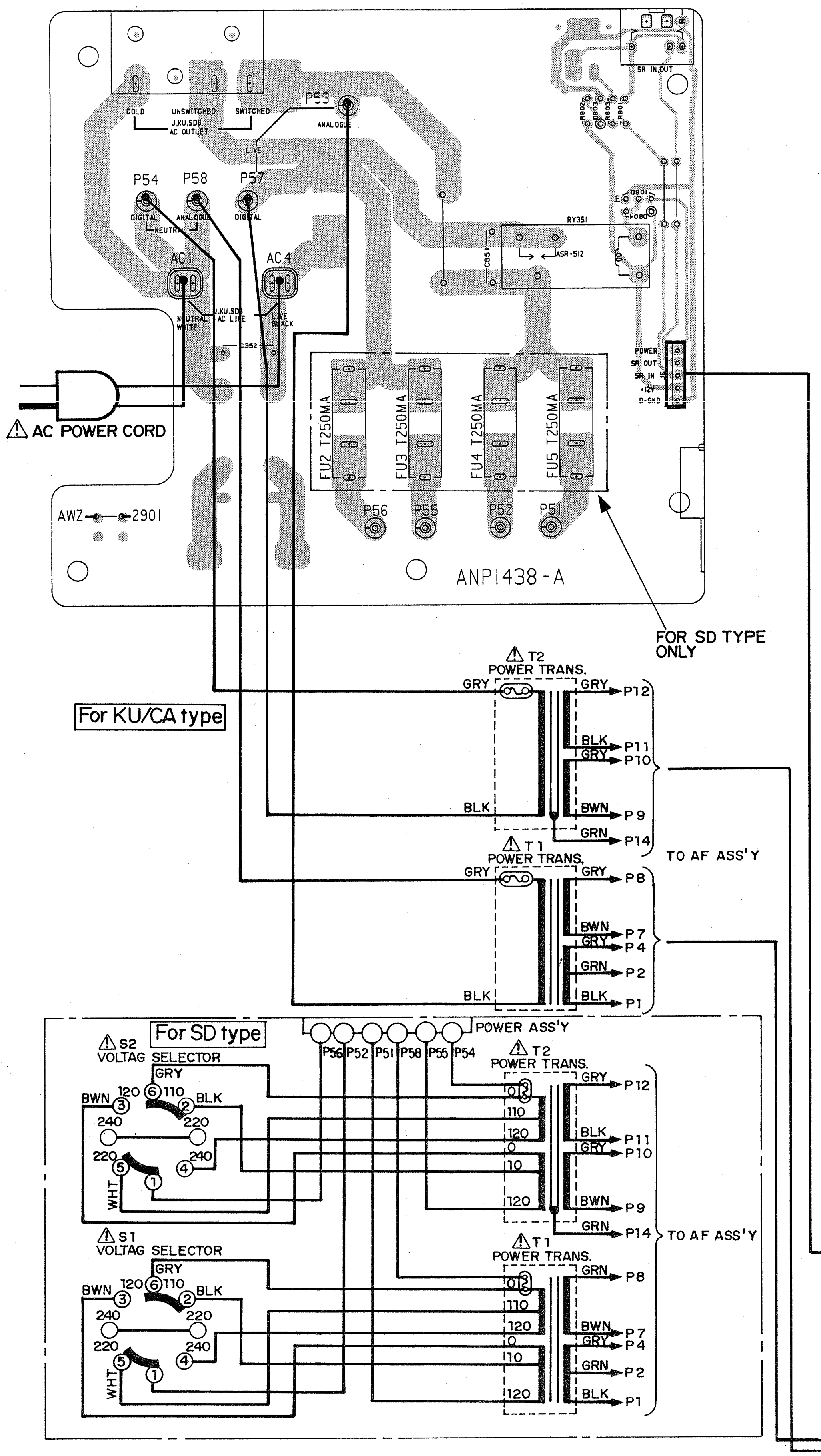
   CONTROL Assembly

S701	:	POWER SW (STANDBY-ON)
S702	:	LD
S703	:	TV/AUX
S704	:	VCR1
S705	:	VCR2
S706	:	VIDEO
S707	:	PHONO
S708	:	TAPE 2/MONITOR
S709	:	CD
S710	:	TUNER
S711	:	TAPE 1/DAT
S712	:	MUTING
S713	:	SUBSONIC
S714	:	PHONO-SEL
S715	:	DIRECT
S716	:	V-SEL
S717	:	REC-SEL

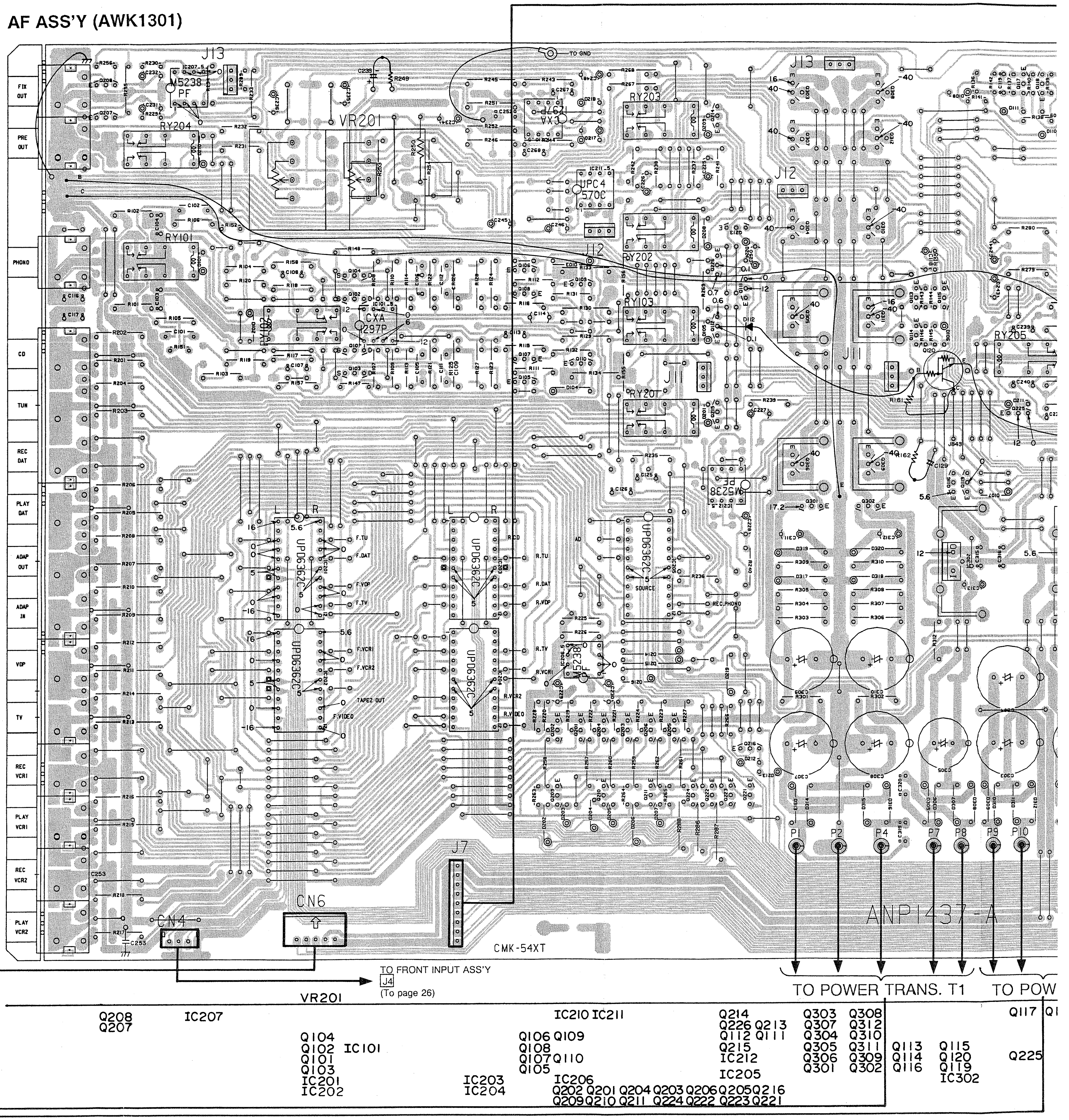
   Outside of P.C. Board

S2	:	VOLTAGE SELECTOR AKX-507 (SD type only)
S1	:	VOLTAGE SELECTOR AKX-507 (SD type only)

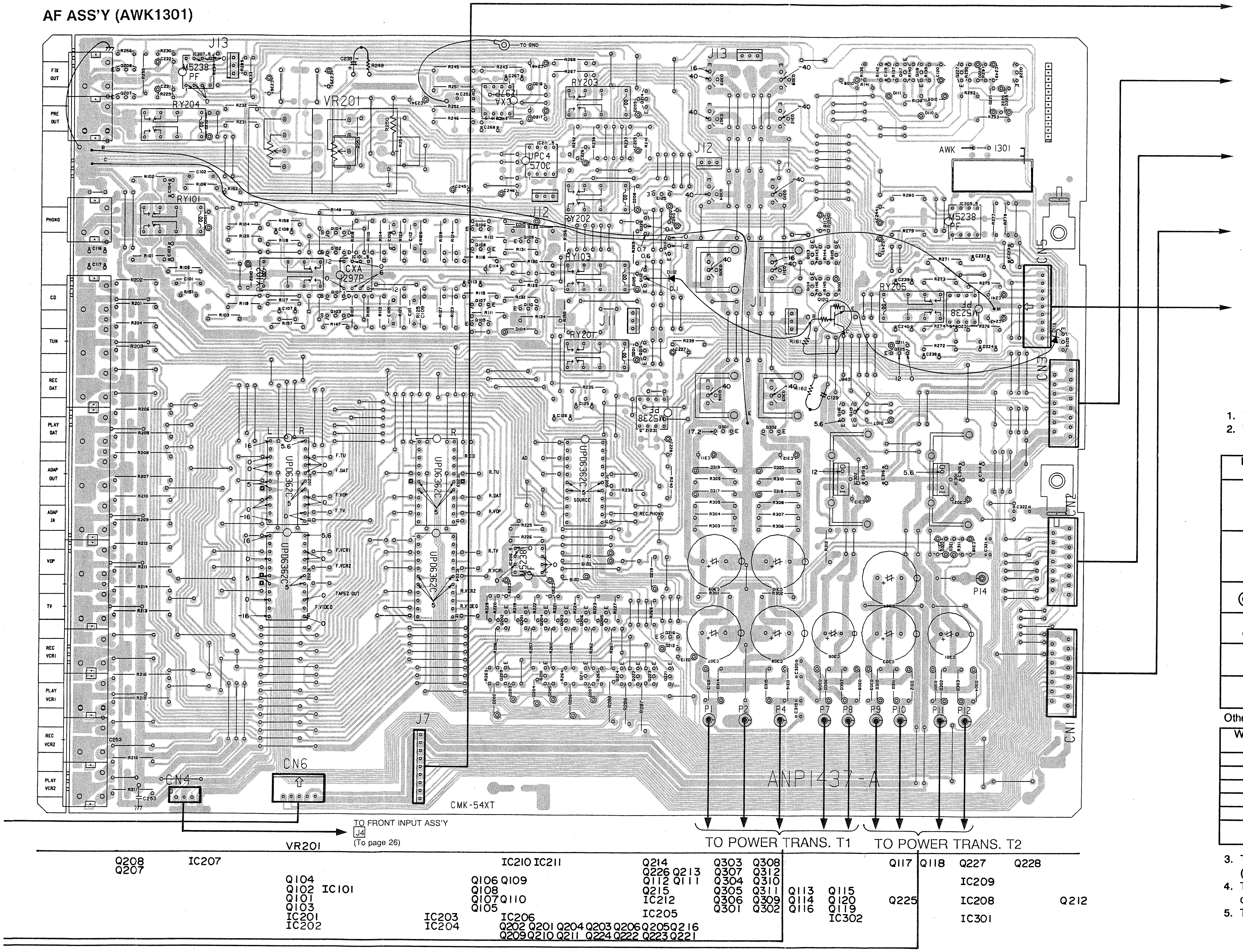
POWER ASS'Y


COLD
UNSWITCHED
SWITCHED
J,KU,SDG AC OUTLET
P53
ANALOGUE
LIVE
P54
P58
P57
DIGITAL
NEUTRAL
ANALOGUE
DIGITAL
AC1
AC4
NEUTRAL WHITE
J,KU,SDG AC LINE
LIVE BLACK
RY351
ASR-512
⚠ AC POWER CORD
FU2 T250MA
FU3 T250MA
FU4 T250MA
FU5 T250MA
P56
P55
P52
P51
AWZ 2901
ANP1438-A
POWER
SR OUT
SR IN
+12V
D-GND
SR IN,OUT
FOR SD TYPE ONLY
For KU/CA type
⚠ T2 POWER TRANS.
GRY
GRY P12
BLK P11
GRY P10
BLK
BWN P9
GRN P14
TO AF ASS'Y
⚠ T1 POWER TRANS.
GRY
GRY P8
BWN P7
GRY P4
GRN P2
BLK
BLK P1
For SD type
POWER ASS'Y
P56 P52 P51 P58 P55 P54
⚠ S2 VOLTAG SELECTOR
GRY
BWN 120 110 BLK
240 220
220 240
WHT
⚠ T2 POWER TRANS.
GRY P12
BLK P11
GRY P10
BWN P9
GRN P14
TO AF ASS'Y
⚠ S1 VOLTAG SELECTOR
GRY
BWN 120 110 BLK
240 220
220 240
WHT
⚠ T1 POWER TRANS.
GRN P8
BWN P7
GRY P4
GRN P2
BLK P1
110
120
0
10
120

AF ASS'Y (AWK1301)


FIX OUT
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
REC VCR1
PLAY VCR1
REC VCR2
PLAY VCR2
J13
M5238 PF
VR201
RY204
RY101
TO GND
µPC4570C
RY203
RY202
RY103
RY201
RY205
J12
J11
CXA1297P
UPD6362C
M5238 PF
M5238 FP
J7
CN4
CN6
CMK-54XT
ANP1437-A
P1 P2 P4 P7 P8 P9 P10
TO FRONT INPUT ASS'Y J4 (To page 26)
TO POWER TRANS. T1
TO POW
VR201
Q208 Q207
IC207
Q104 Q102 Q101 Q103 IC201 IC202
IC101
IC203 IC204
IC210 IC211
Q106 Q109 Q108 Q107 Q110 Q105
IC206
Q202 Q201 Q204 Q203 Q206 Q205 Q216
Q209 Q210 Q211 Q224 Q222 Q223 Q221
Q214 Q226 Q213 Q112 Q111 Q215 IC212 IC205
Q303 Q307 Q304 Q305 Q306 Q301
Q308 Q312 Q310 Q311 Q309 Q302
Q113 Q114 Q116
Q115 Q120 Q119 IC302
Q117
Q225

AF ASS'Y (AWK1301)


FIX OUT
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
REC VCR1
PLAY VCR1
REC VCR2
PLAY VCR2
J13
RY204
VR201
RY203
RY101
RY202
RY103
RY201
RY205
J12
J11
J7
CN4
CN6
CN1
CN2
CN3
CN5
AWK 1301
ANP1437-A
CMK-54XT
P1 P2 P4 P7 P8 P9 P10 P11 P12
P14
VR201
Q208 Q207
IC207
Q104 Q102 IC101 Q101 Q103 IC201 IC202
IC203 IC204
IC210 IC211
Q106 Q109 Q108 Q107 Q110 Q105
IC206
Q202 Q201 Q204 Q203 Q206 Q205 Q216
Q209 Q210 Q211 Q224 Q222 Q223 Q221
Q214 Q226 Q213 Q112 Q111 Q215 IC212 IC205
Q303 Q307 Q304 Q305 Q306 Q301
Q308 Q312 Q310 Q311 Q309 Q302
Q113 Q114 Q116
Q115 Q120 Q119 IC302
Q117 Q225
Q118
Q227 IC209 IC208 IC301
Q228
Q212

TO VIDEO ASS'Y
CN7
(To page 25)

TO CONTROL ASS'Y
J3
(To page 25)

TO CONTROL ASS'Y
J2
(To page 25)

TO CONTROL ASS'Y
J1
(To page 24)

TO CONTROL ASS'Y
J5
(To page 25)

TO FRONT INPUT ASS'Y
J4
(To page 26)

TO POWER TRANS. T1

TO POWER TRANS. T2

1. This P.C.B connection diagram is seen from the parts mount side.
2. The parts mounted on to the P.C.B can be replaced with those shown in the following correspondence table with wiring marks.

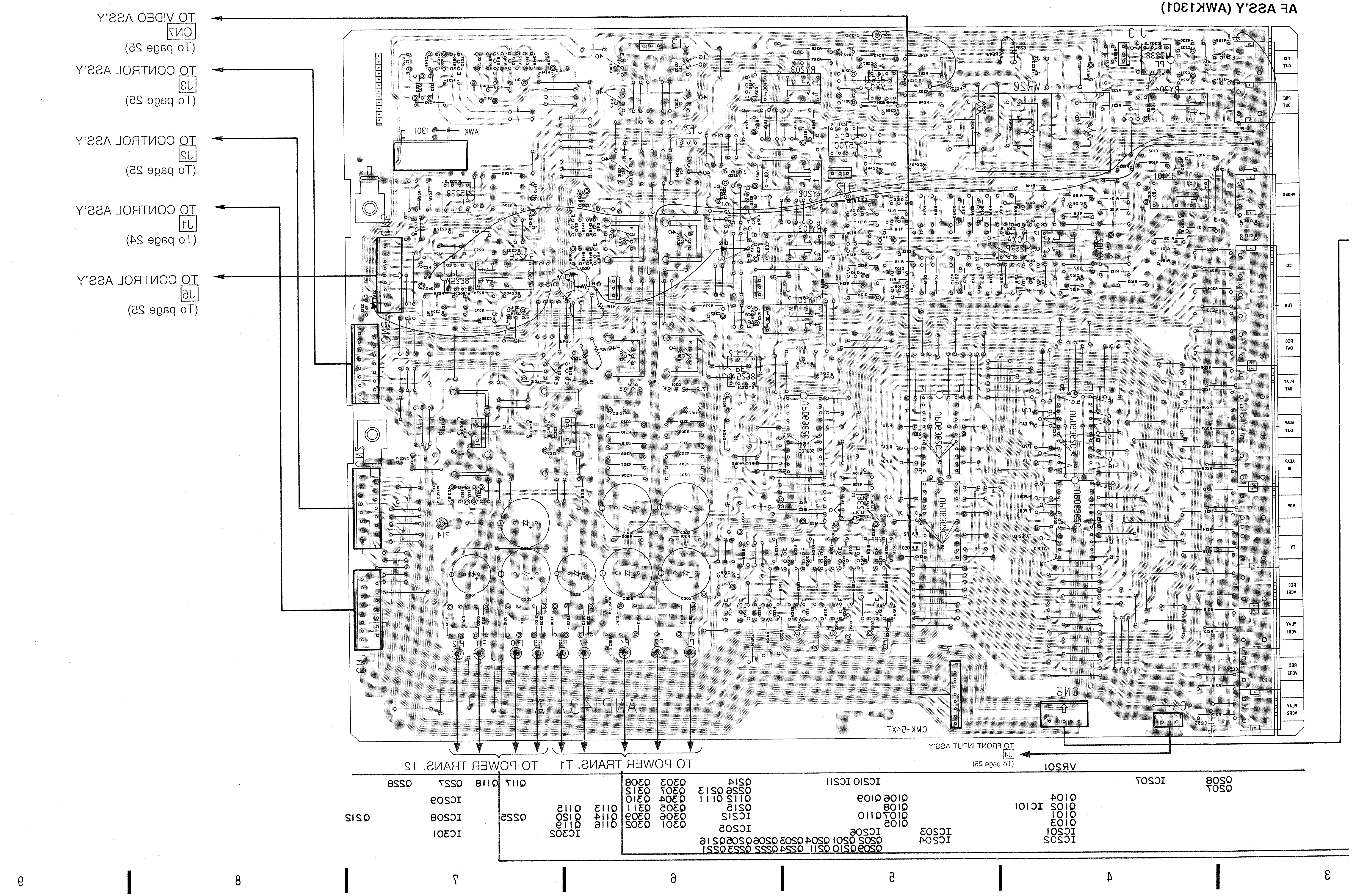
Indication of the P.C.B. pattern	Symbol of corresponding parts	Parts name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Condenser (Polar type)
C518		Condenser (Non-polar type)

Others

Wiring mark on the P.C.B pattern diagram	Parts list
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or semi-fixed resistor

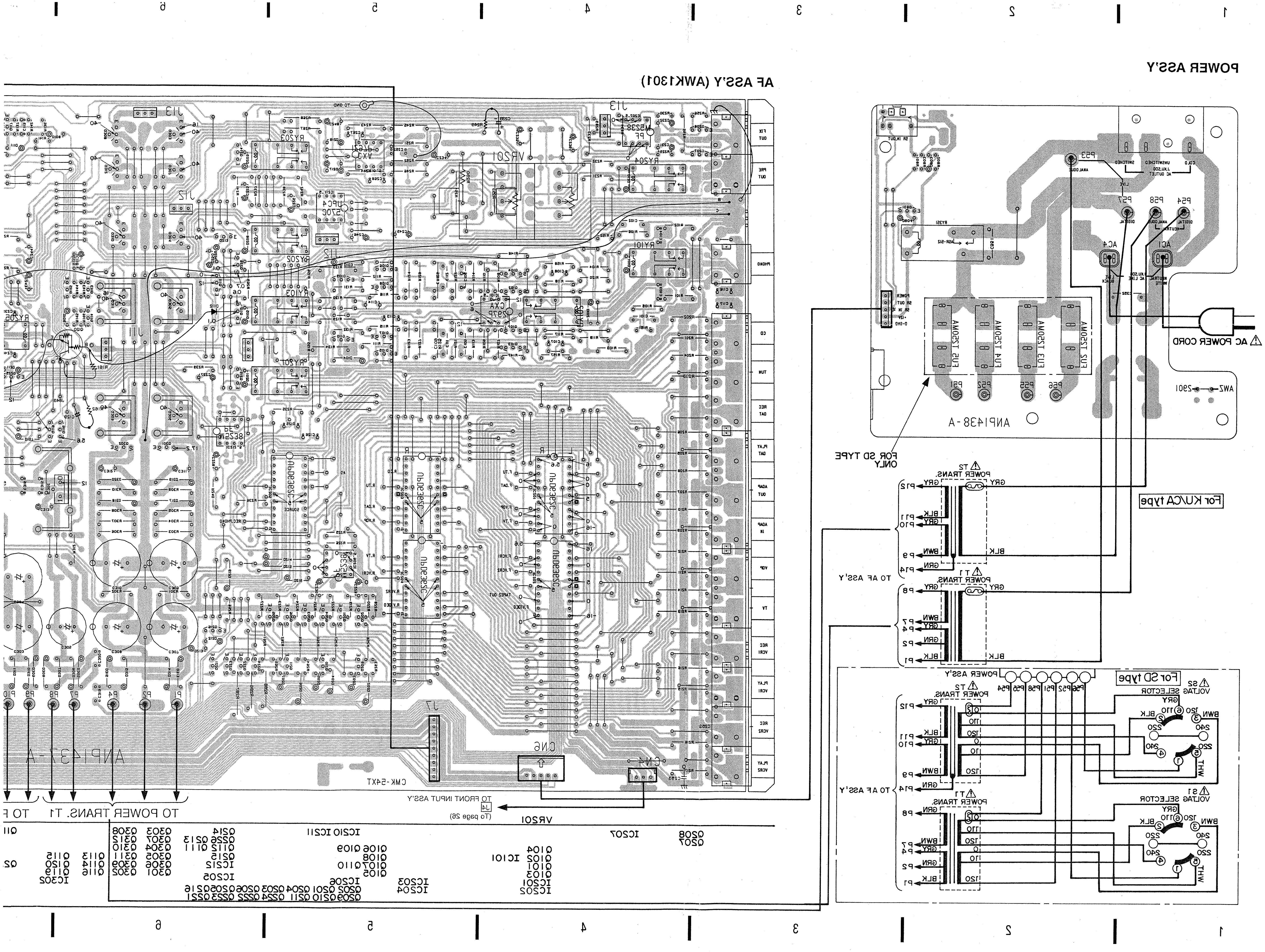
3. The condenser terminal marked with double circles (◎) represents (–) terminal.
4. The diode terminal marked with double circles (◎) represents the cathode side.
5. The transistor terminal marked with "E" represents an emitter.

his P.C.B. connection diagram is viewed from the foil side.

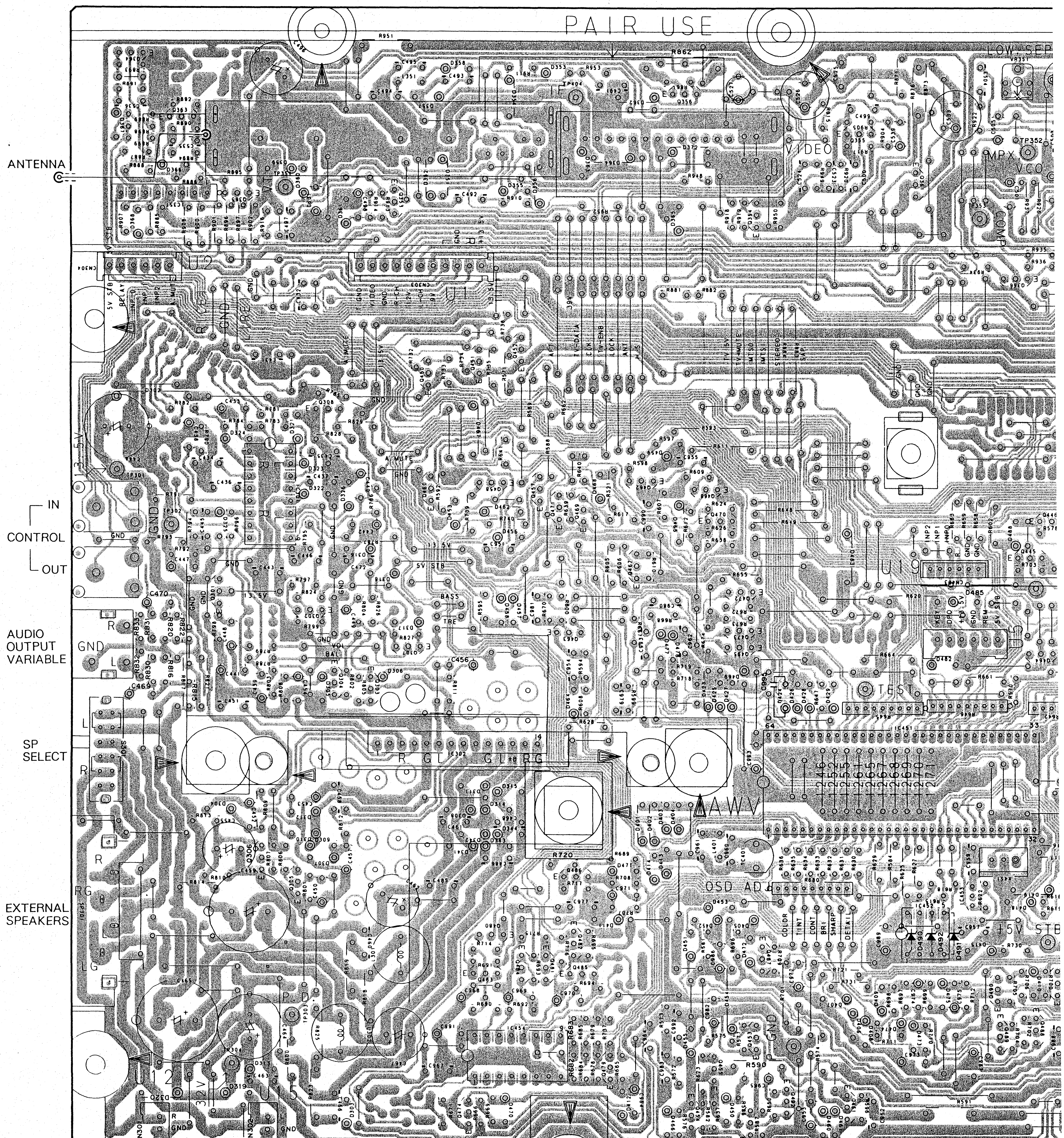

AF ASS'Y (AWK1301)
TO VIDEO ASS'Y
CN7
(To page 25)
TO CONTROL ASS'Y
J3
(To page 25)
TO CONTROL ASS'Y
J2
(To page 25)
TO CONTROL ASS'Y
J1
(To page 24)
TO CONTROL ASS'Y
J5
(To page 25)
TO POWER TRANS. T2
TO POWER TRANS. T1
TO FRONT INPUT ASS'Y
J4
(To page 26)
ANP1437-A
CMK-54XT
CN1
CN2
CN3
CN4
CN5
CN6
J7
J11
J12
J13
VR201
RY101
RY103
RY201
RY202
RY203
RY204
RY205
RY207
FIX OUT
PRE OUT
PHONO
CD
TUN
REC TAPE
PLAY TAPE
ADAP OUT
ADAP IN
VDP
TV
REC VCR1
PLAY VCR1
REC VCR2
PLAY VCR2
P1
P2
P4
P7
P8
P9
P10
P11
P12
P14

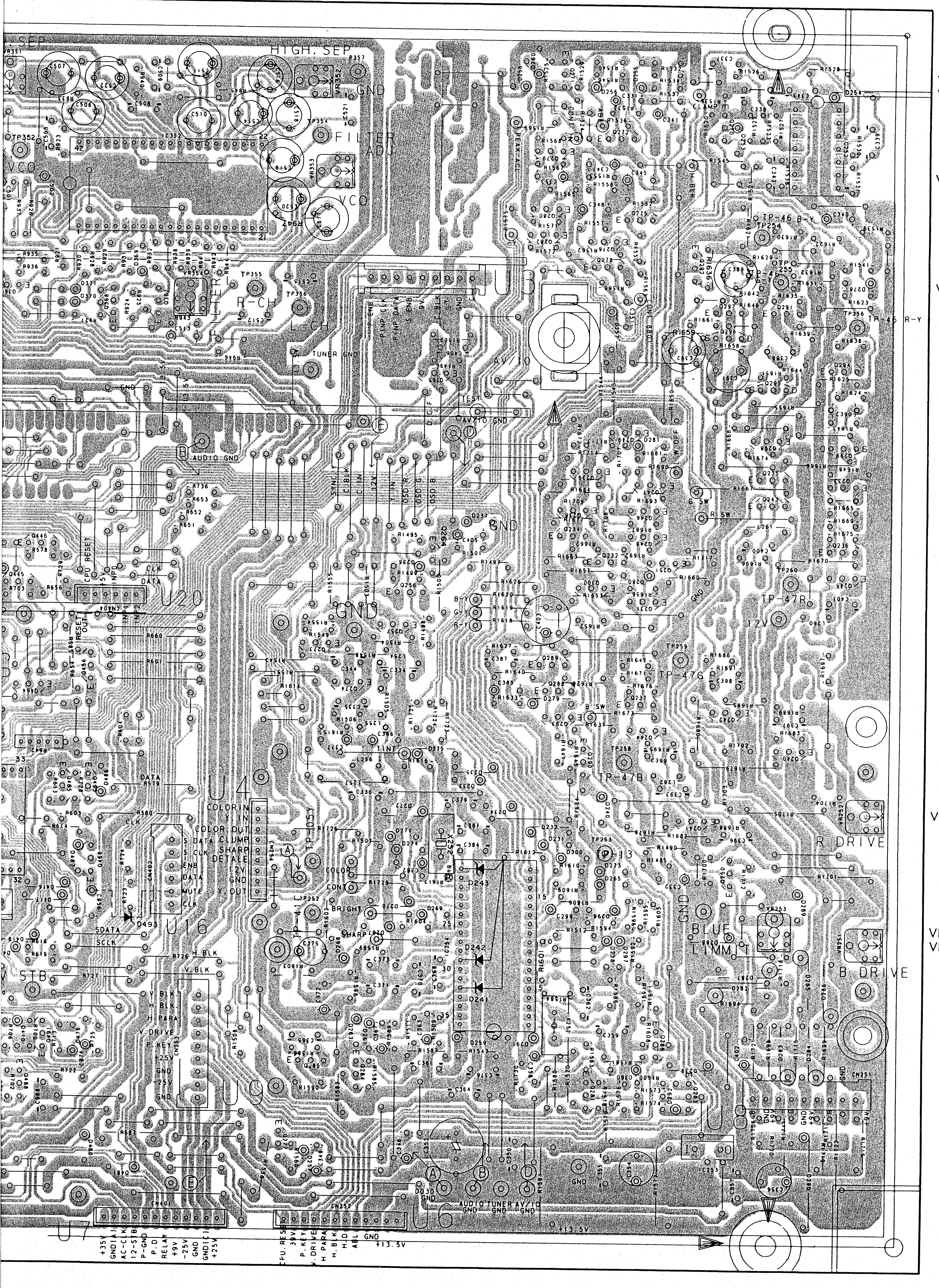
AF ASS'Y (AWK1301)

POWER ASS'Y


A
B
C
D
1
2
3
4
5
6
FIX OUT
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
REC VCR1
PLAY VCR1
REC VCR2
PLAY VCR2
J11
J12
J13
J7
CN6
CN4
CMK-54XT
VR201
ANP1437-A
TO POWER TRANS. T1
TO FRONT INPUT ASS'Y J4 (To page 26)
ANP1438-A
AC POWER CORD
AC1
AC4
P51
P52
P53
P54
P55
P56
P57
P58
AW2
2901
FOR SD TYPE ONLY
For KU/CA type
For SD type
T1 POWER TRANS.
T2 POWER TRANS.
TO AF ASS'Y
POWER ASS'Y
S1 VOLTAGE SELECTOR
S2 VOLTAGE SELECTOR
GRY
BLK
BWN
GRN
WHT
110
120
220
240
P1
P2
P4
P7
P8
P9
P10
P11
P12
P14

TUNER-VIDEO ASSEMBLY
(AWV1271)


PAIR USE
ANTENNA
IN
CONTROL
OUT
AUDIO
OUTPUT
VARIABLE
GND
SP
SELECT
EXTERNAL
SPEAKERS
(RED)
(WHT)
ANP1561-B
YG-M3
VIDEO
MPX
VCO
COMP
LOW SEP
TEST
OSD ADJ
AWV
+5V STB
13.5V
32V
CN301
CN302
CN304
CN303
COLOR
TINT
CONT
BRI
SHARP
DETAIL
TV-DATA
CLK
TV-ENB
LOCK
ANT
H.S
AFT
A.MUTE
BASS
TRE
VOL
BAL


HIGH. SEP
VR352
VR351
GND
FILTER ADJ
VCO
VR353
R-CH
L-CH
TUNER GND
AUDIO GND
CPU RESET
U20
U3
AV/10
TEST
AV/10 GND
SYNC.Y
C.BLK
C.IN
12V
Y.IN
OSD.R
OSD.G
OSD.B
GND
U4
COLOR IN
Y.IN
COLOR OUT
S.DATA
S.CLK
CLUMP
SHARP
DETALE
12V
GND
Y.OUT
TP-05Y
TP-41C
COLOR
CONT
BRIGHT
SHARP
TINT
TP-47B
TP-47G
TP-47R
TP-46 B-Y
TP-45 R-Y
G SW
R SW
B SW
U16
SDATA
SCLK
H.BLK
V.BLK
H.PARA
V.DRIVE
P.KEY
V STB
U9
U6
U7
U8
AUDIO TUNER AV/10
GND GND GND
+13.5V
+35V
GND(A)
AC-CLK
12-STB
P-GND
P.D
RELAY
+9V
-25V
GND
GND(C)
+25V
CPU.RESET
39V
P.KEY
V.DRIVE
H.PARA
H.BLK
H.D
ABL
GND
BLUE LIMMIT
R DRIVE
B DRIVE
VR252
VR253
VR251
5
6
7
8
A
B
C
D
E
F

VR351
VR352

Q364
Q271
Q356

Q363 Q270

Q355 Q272 IC252
Q279

VR353 IC352
Q361

IC351 Q365
Q353 Q354 Q280 Q275
Q282
Q276

Q278 Q292

VR354
Q366
Q367 Q297 Q291
Q368
Q296

Q452 Q294
Q451 Q265 Q295
Q450

Q308
Q249 Q298 Q299

Q239 Q247 Q235 Q233
IC301 Q243
Q458 Q462 Q238 Q246
Q460 Q457
Q468 Q234 Q248
| Q446 Q236
Q471 Q264 Q232 Q251

Q445 Q300 Q245
Q467
Q256 Q231

Q301 Q472 Q257
Q302 Q273
Q463 Q473 Q289
Q495 Q456
Q307 Q464 Q288 Q274
Q237

Q303 Q293 Q242
Q304 Q244
Q240
Q290

IC302 Q465
Q493
VR252 IC451
Q241

Q466 Q250

Q306
VR253 Q486 IC254
VR251 Q305
IC453

IC452

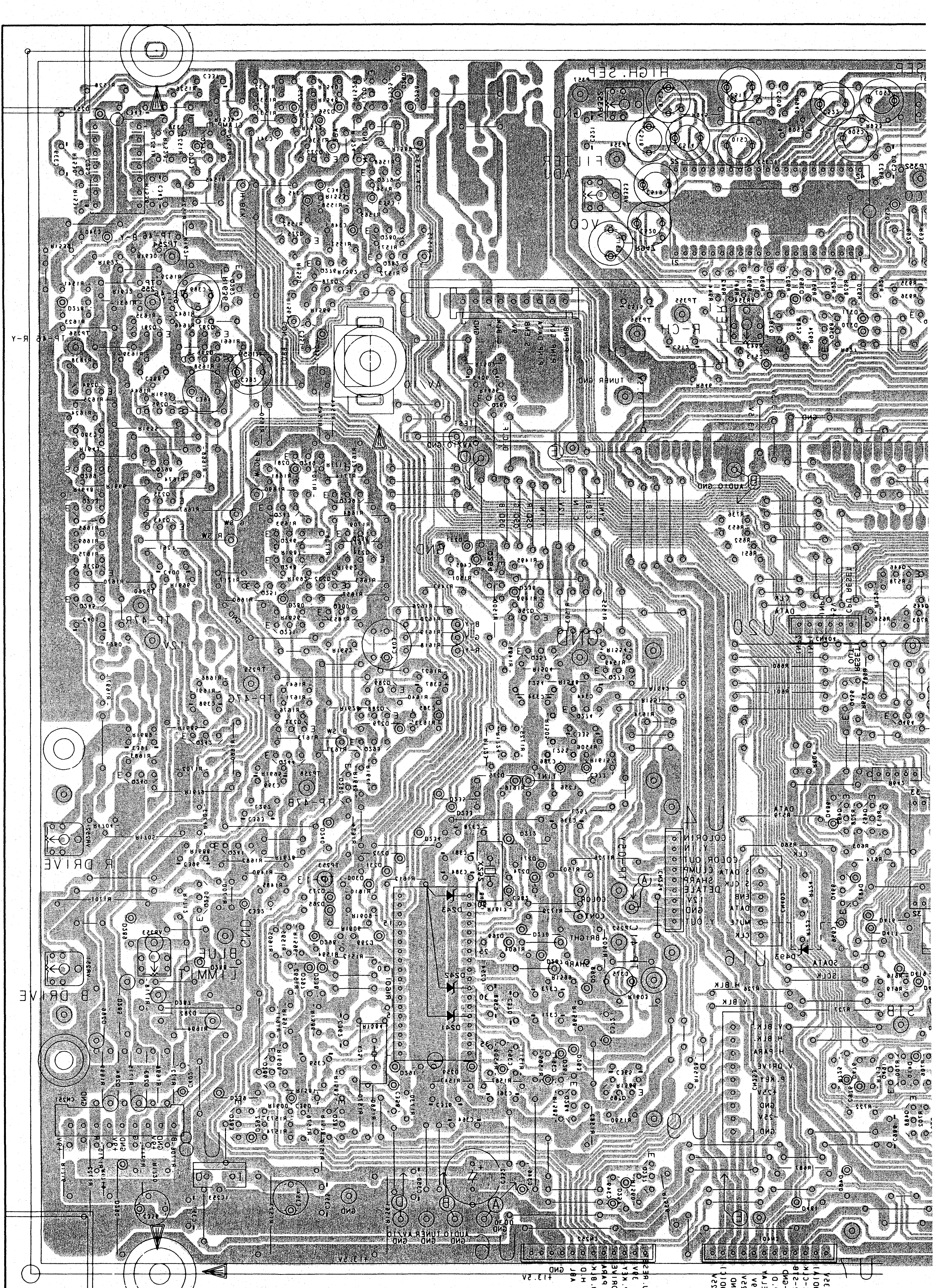
Q480
|
Q485 Q487

Q286
Q488 Q285
| Q284
Q491 Q281

Q453 Q283
IC454
Q479 Q455 IC253

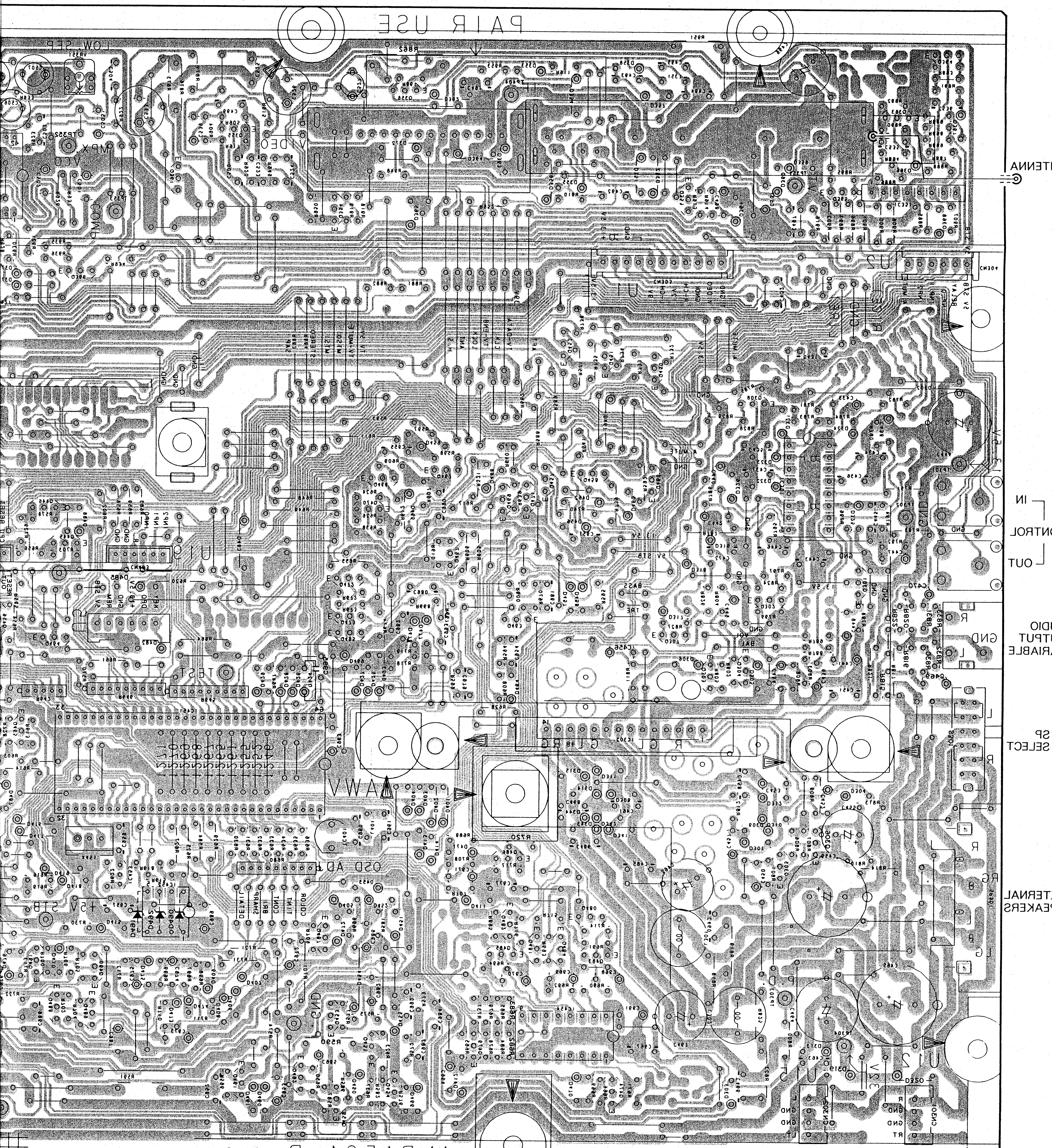
Q474 Q492 Q277
Q461
Q454
Q459

Q364
VR351 Q271
VR352 Q356
Q363 Q270
Q355 Q272 IC252
Q279
VR353 IC352
Q361
IC351 Q365
Q353 Q354 Q280 Q275
Q282
Q276
Q278 Q292
VR354
Q366
Q367 Q297 Q291
Q368
Q296
Q452 Q294
Q451 Q265 Q295
Q450
Q308
Q249 Q298 Q299
Q239 Q247 Q235 Q233
IC301 Q243
Q458 Q462 Q238 Q246
Q460 Q457
Q468 Q234 Q248
| Q446 Q236
Q471 Q264 Q232 Q251
Q445 Q300 Q245
Q467
Q256 Q231
Q301 Q472 Q257
Q302 Q273
Q463 Q473 Q289
Q495 Q456
Q307 Q464 Q288 Q274
Q237
Q303 Q293 Q242
Q304 Q244
Q240
Q290
IC302 Q465
Q493
VR252 IC451
Q241
Q466 Q250
Q306
VR253 Q486 IC254
Q305
VR251 IC453
IC452
Q480
|
Q485 Q487
Q286
Q488 Q285
| Q284
Q491 Q281
Q453 Q283
IC454
Q479 Q455 IC253
Q474 Q492 Q277
Q461
Q454
Q459



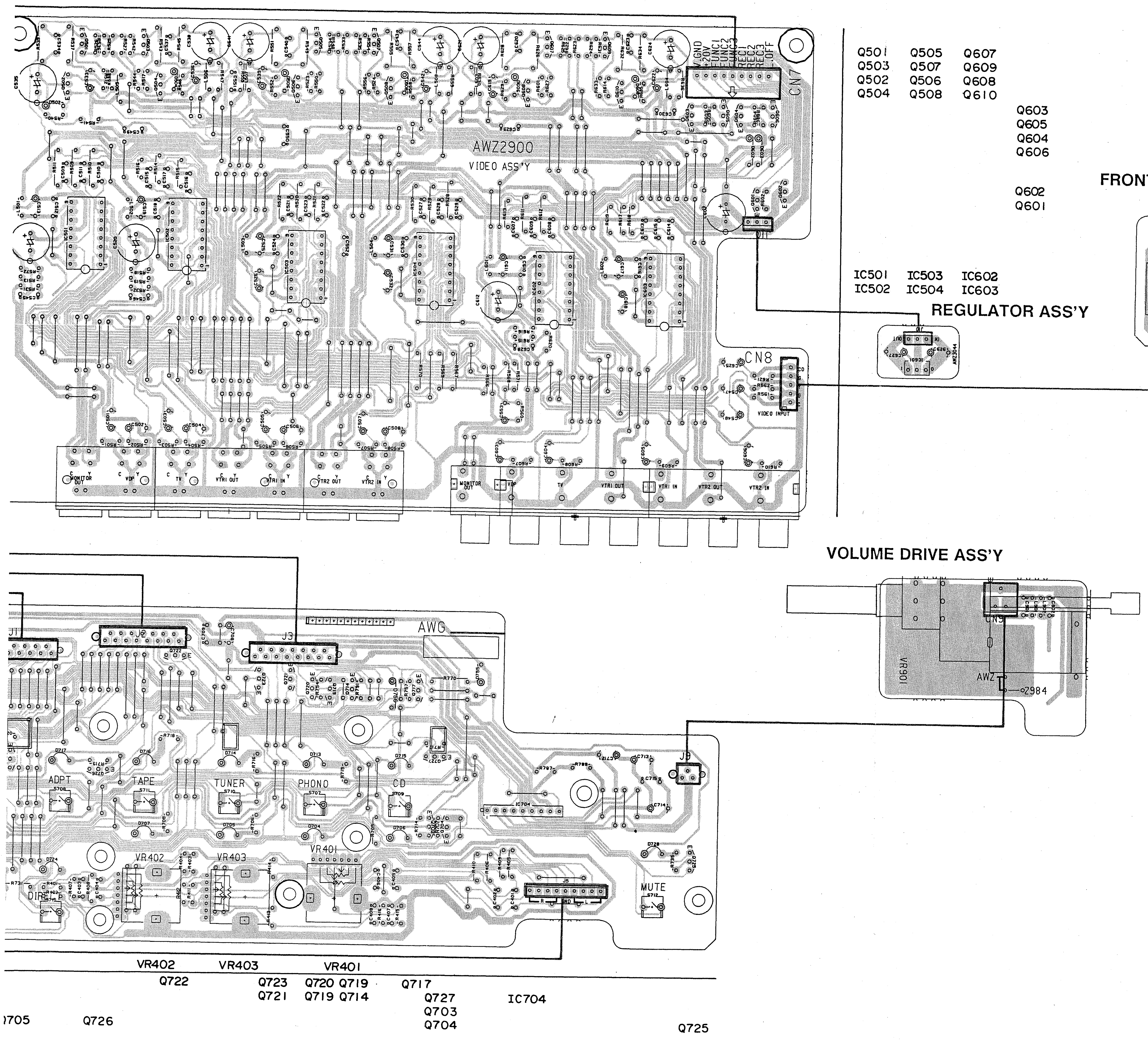
This P.C.B. connection diagrar

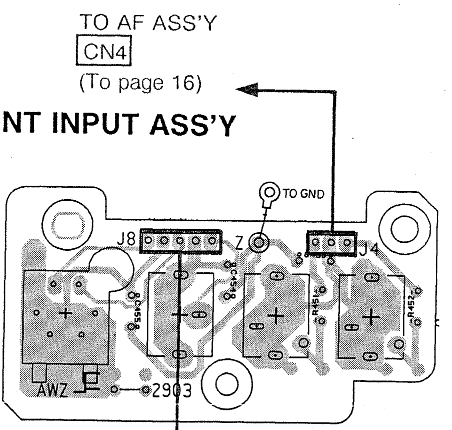
TUNER-VIDEO ASSEMBLY
(AWV1271)


PAIR USE
ANTENNA
IN
CONTROL
OUT
AUDIO
OUTPUT
VARIABLE
GND
SP
SELECT
EXTERNAL
SPEAKERS
ANP1561-B YG-M3
(WHT)
(RED)
VIDEO
COMP
LOW SEP
OSD ADJ
TEST
+5V STB
A.MUTE
5V STB
BASS
TRE
VOL
BAL
AWV
1
2
3
4
5
A
B
C
D
E
F

nection diagram is viewed from the foil side.

DEO ASS'Y (AWZ2900)


CN7
VGND
20V
FUNC1
FUNC2
FUNC3
REC1
REC2
REC3
OFF
AWZ2900
VIDEO ASS'Y
CN8
VIDEO INPUT
MONITOR OUT
VDP
TV
VTR1 OUT
VTR1 IN
VTR2 OUT
VTR2 IN
Q501 Q505 Q607
Q503 Q507 Q609
Q502 Q506 Q608
Q504 Q508 Q610
Q603
Q605
Q604
Q606
Q602
Q601
IC501 IC503 IC602
IC502 IC504 IC603
REGULATOR ASS'Y
VOLUME DRIVE ASS'Y
CN9
VR901
AWZ
2984
J1
J2
J3
J5
J9
AWG
ADPT
TAPE
TUNER
PHONO
CD
MUTE
VR402
VR403
VR401
IC704
VR402 VR403 VR401
Q722 Q723 Q720 Q719 Q717
Q721 Q719 Q714
Q727
Q703
Q704
IC704
)705 Q726
Q725


TO AF ASS'Y
CN4
(To page 16)
FRONT INPUT ASS'Y
TO GND
J8
Z
J4
AWZ
2903

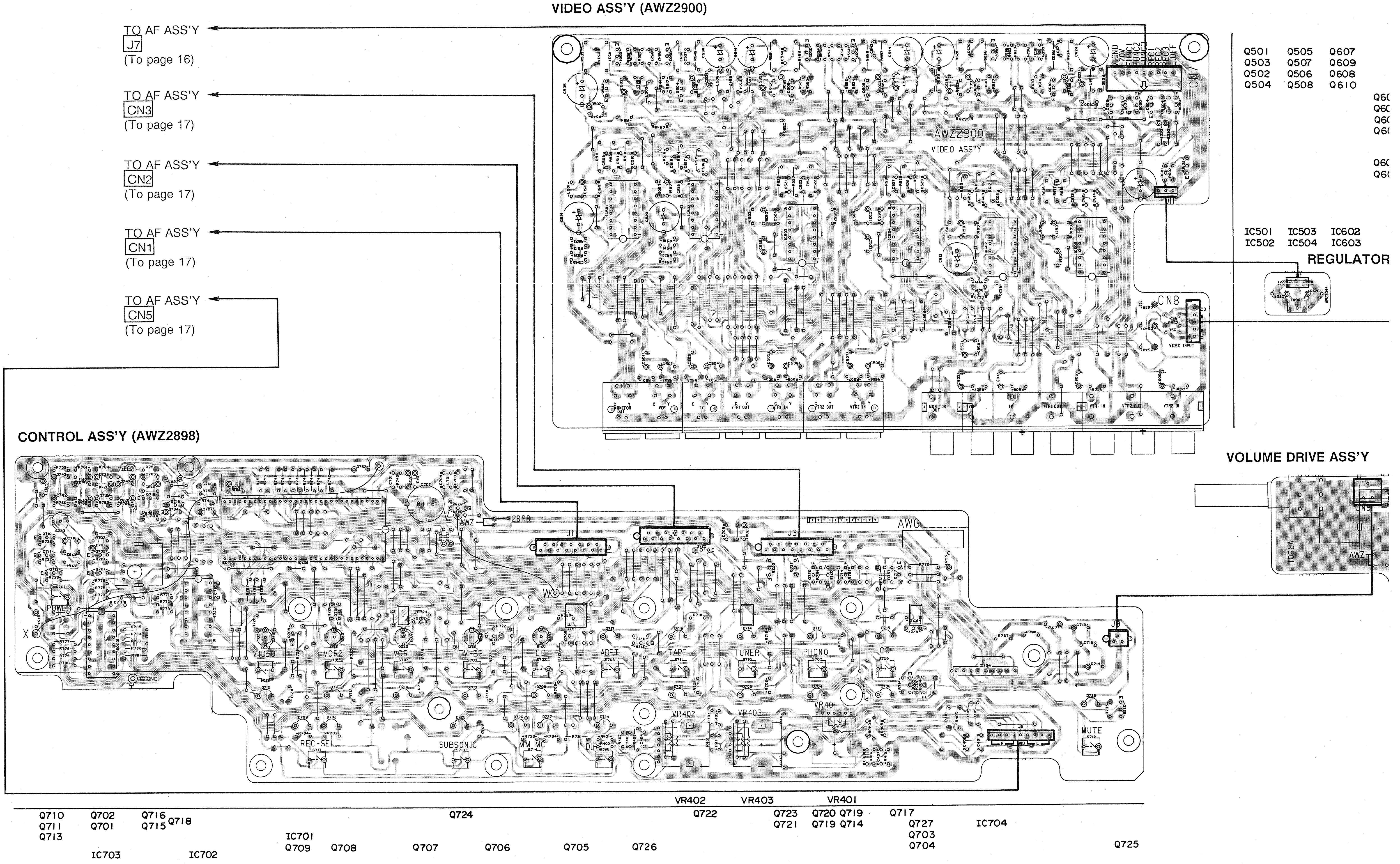
1. This P.C.B connection diagram is seen from the parts mount side.
2. The parts mounted on to the P.C.B can be replaced with those shown in the following correspondence table with wiring marks.

Indication of the P.C.B. pattern	Symbol of corresponding parts	Parts name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Condenser (Polar type)
C518		Condenser (Non-polar type)

Others

Wiring mark on the P.C.B pattern diagram	Parts list
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or semi-fixed resistor

3. The condenser terminal marked with double circles (◎) represents (–) terminal.
4. The diode terminal marked with double circles (◎) represents the cathode side.
5. The transistor terminal marked with "E" represents an emitter.



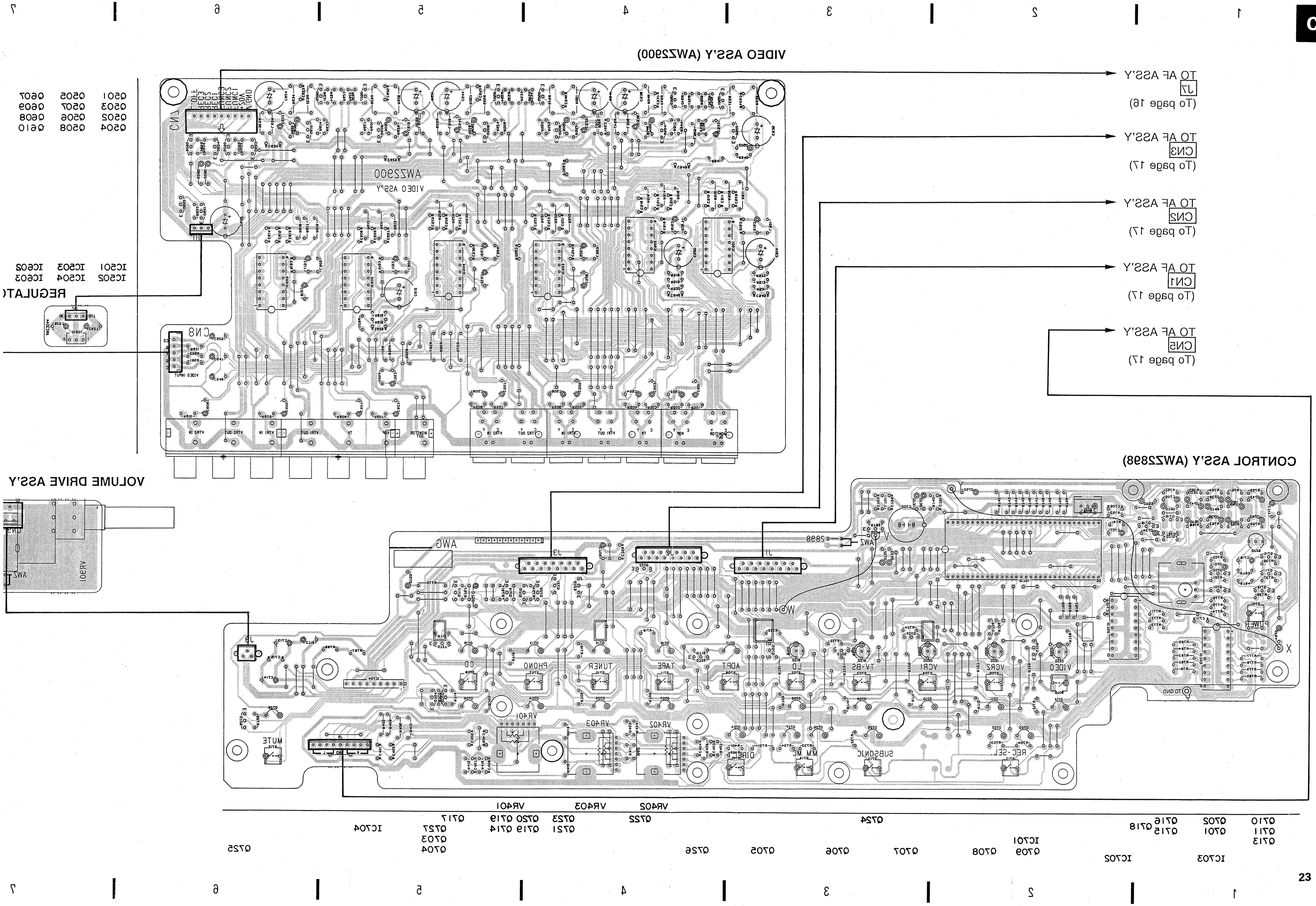
VIDEO ASS'Y (AWZ2900)

CONTROL ASS'Y (AWZ2898)

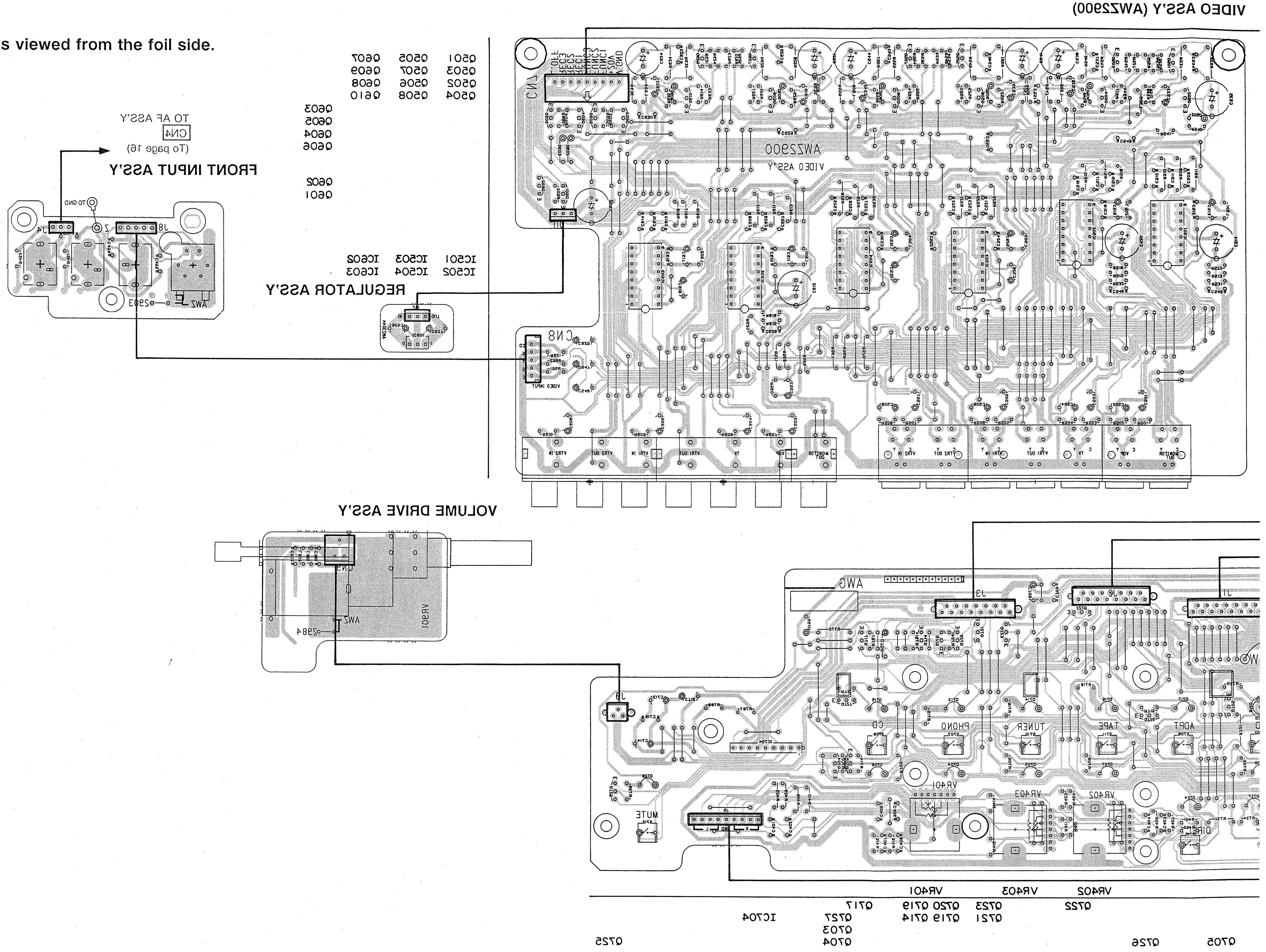
REGULATOR

VOLUME DRIVE ASS'Y

TO AF ASS'Y
J7
(To page 16)
TO AF ASS'Y
CN3
(To page 17)
TO AF ASS'Y
CN2
(To page 17)
TO AF ASS'Y
CN1
(To page 17)
TO AF ASS'Y
CN5
(To page 17)
AWZ2900
VIDEO ASS'Y
CN7
CN8
VIDEO INPUT
MONITOR
VDP
TV
VTR1 OUT
VTR1 IN
VTR2 OUT
VTR2 IN
Q501 Q505 Q607
Q503 Q507 Q609
Q502 Q506 Q608
Q504 Q508 Q610
Q60
Q60
Q60
Q60
Q60
Q60
IC501 IC503 IC602
IC502 IC504 IC603
J1
J2
J3
J9
AWZ
2898
AWG
POWER
VIDEO
VCR2
VCR1
TV-BS
LD
ADPT
TAPE
TUNER
PHONO
CD
REC-SEL
SUBSONIC
MM MC
DIRECT
MUTE
VR402
VR403
VR401
TO GND
X
W
V
VR901
CN9
Q710 Q702 Q716
Q711 Q701 Q715 Q718
Q713
IC703 IC702
IC701
Q709 Q708
Q724
Q707 Q706 Q705 Q726
VR402 VR403 VR401
Q722
Q723 Q720 Q719
Q721 Q719 Q714
Q717
Q727
Q703
Q704
IC704
Q725

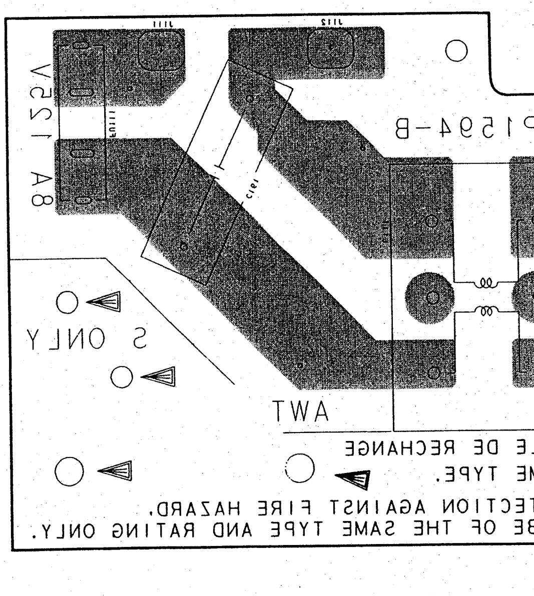

VIDEO ASS'Y (AWZ2900)
CONTROL ASS'Y (AWZ2898)
VOLUME DRIVE ASS'Y
REGULAT
TO AF ASS'Y J7 (To page 16)
TO AF ASS'Y CN3 (To page 17)
TO AF ASS'Y CN2 (To page 17)
TO AF ASS'Y CN1 (To page 17)
TO AF ASS'Y CN5 (To page 17)
Q501 Q503 Q502 Q504
Q505 Q507 Q506 Q508
Q607 Q609 Q608 Q610
IC501 IC502
IC503 IC504
IC602 IC603
AWZ2900 VIDEO ASS'Y
CN7
CN8
VIDEO INPUT
VTR2 IN
VTR2 OUT
VTR1 IN
VTR1 OUT
TV
VDP
MONITOR OUT
AWZ2898
J1
J3
J5
J6
J8
W
X
Y
V
TO GND
MUTE
CD
PHONO
TUNER
TAPE
ADPT
LD
TV-BS
VCR1
VCR2
VIDEO
DIR-E
MM MC
SUBSONIC
REC-SEL
VR401
VR402
VR403
VR501
VR401 VR403 VR402
Q717 Q727 Q703 Q704
Q720 Q719 Q719 Q714
Q723 Q721
Q722
Q724
Q710 Q711 Q713
Q702 Q701
Q716 Q715 Q718
IC701 Q709
IC702
IC703
IC704
Q708
Q707
Q706
Q705
Q726
Q725
1
2
3
4
5
6
7
A
B
C
D

This P.C.B. connection diagram is viewed from the foil side.


VIDEO ASS'Y (AWZ2900)
Q501 Q503 Q502 Q504
Q505 Q507 Q506 Q508
Q607 Q609 Q608 Q610
Q603 Q605 Q604 Q606
Q602 Q601
IC501 IC502
IC503 IC504
IC602 IC603
TO AF ASS'Y
CN4
(To page 16)
FRONT INPUT ASS'Y
REGULATOR ASS'Y
VOLUME DRIVE ASS'Y
AWZ2900
VIDEO ASS'Y
CN1
CN8
VIDEO INPUT
J4
J8
TO GND
AWZ
VR901
CN3
AWG
J3
J9
MUTE
CD
PHONO
TUNER
TAPE
ADPT
VR401
VR403
VR402
VR401 VR403 VR402
Q717 Q720 Q719 Q723 Q722
Q727 Q715 Q714 Q721
IC704
Q703
Q704
Q725 Q726 Q705
A
B
C
D
9
8
7
6
5
4

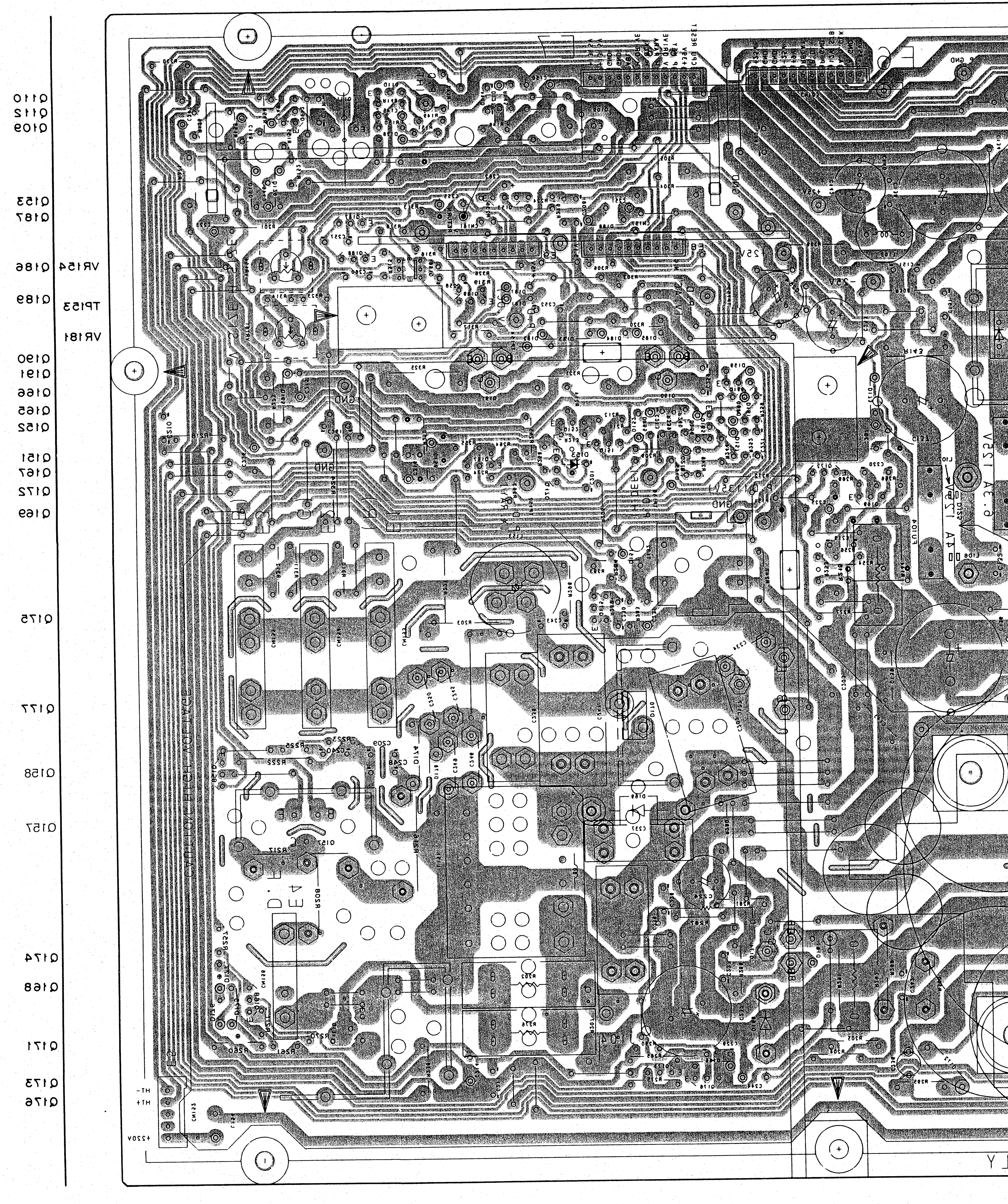
(4) POWER SUPPLY and LINE FILTER ASSEMBLIES

LINE FILTER ASSEMBLY
(AWT1010)

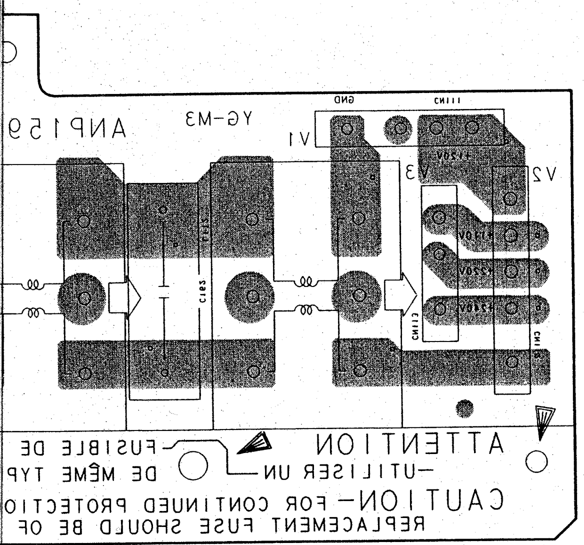


V121 A8
S ONLY
AWT
...E DE RECHANGE
...E TYPE.
...ECTION AGAINST FIRE HAZARD.
...E OF THE SAME TYPE AND RATING ONLY.

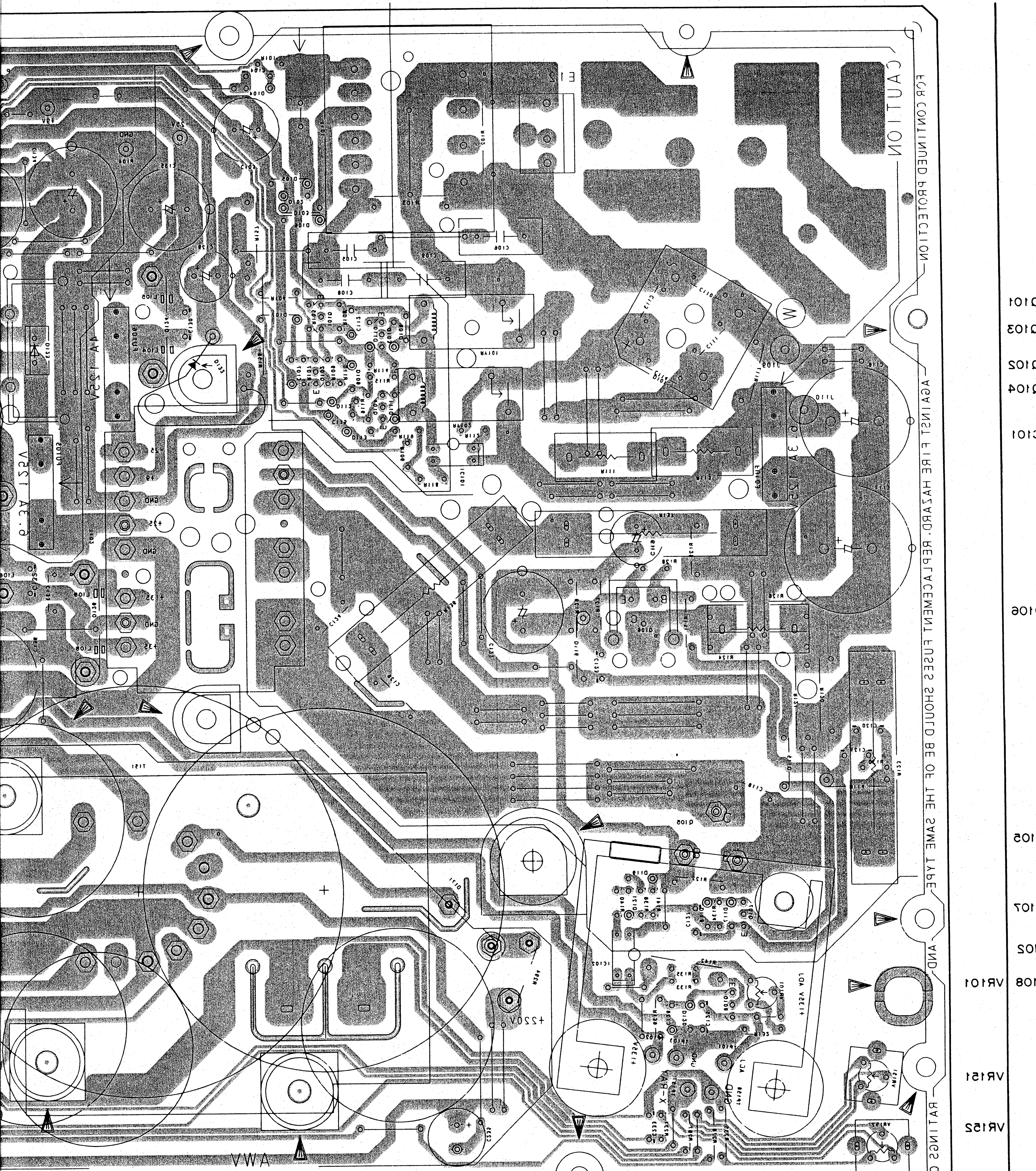
This P.C.B. connection diagram is viewed from the foil side.

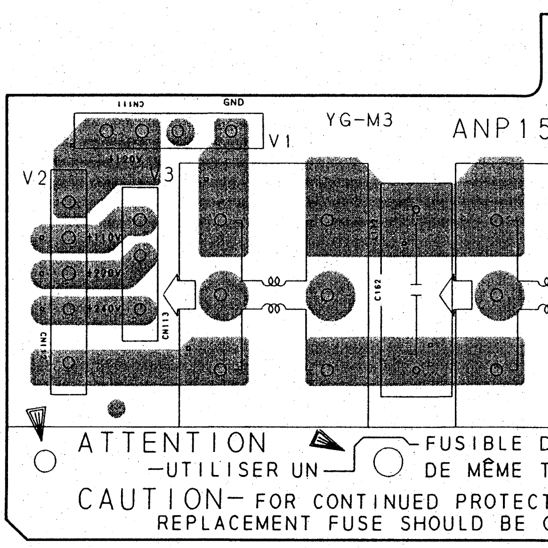


Q110
Q112
Q109
Q153
Q187
Q186
VR154
Q189
TP153
VR181
Q190
Q191
Q166
Q165
Q152
Q151
Q167
Q172
Q169
Q175
Q177
Q158
Q157
Q174
Q168
Q171
Q173
Q176
CAUTION HIGH VOLTAGE
GND

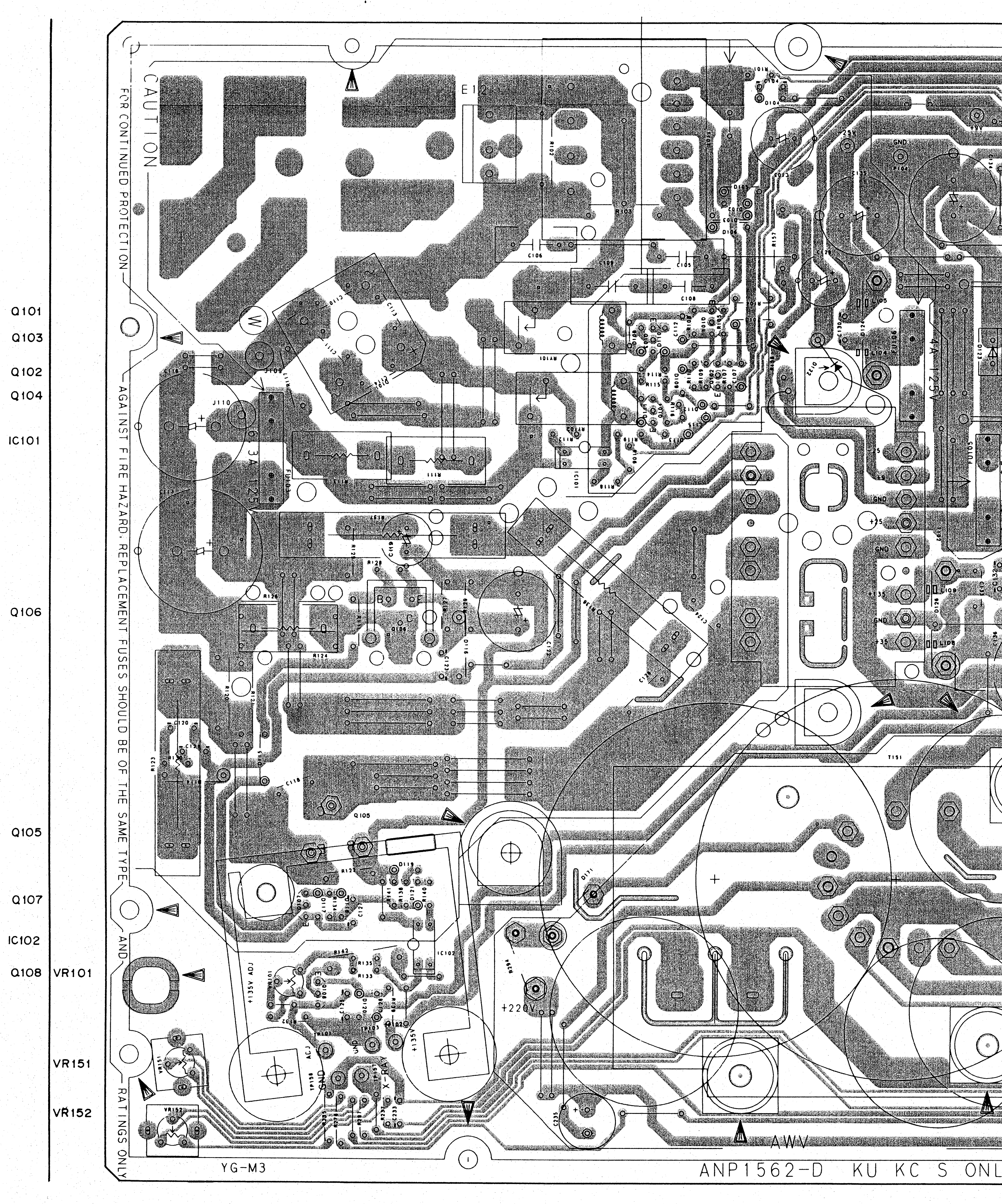

ATTENTION
—UTILISER UN—
—FUSIBLE DE
DE MÊME TYP
CAUTION—FOR CONTINUED PROTECTIO
REPLACEMENT FUSE SHOULD BE OF
YG-M3
ANP159
V1
V2
GND

☆POWER SUPPLY ASSEMBLY
(AWV1295)

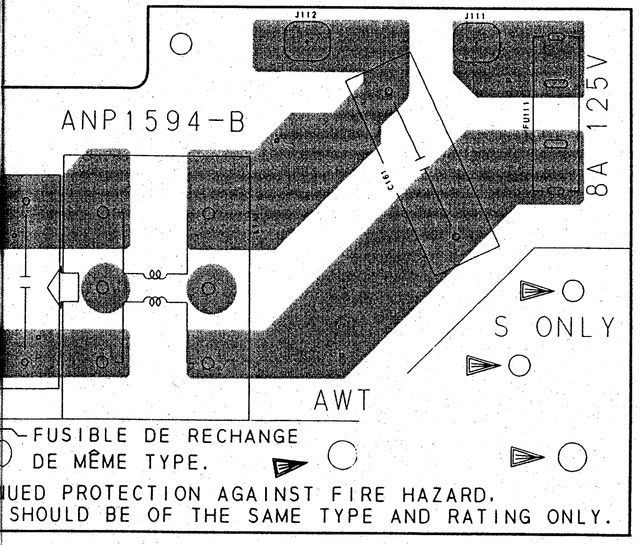

CAUTION
FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD. REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE
AND
RATINGS ONLY
ANP1562-D KU KC S ONLY
YG-M3
AWV
+220V
6.3A 125V
4A 125V
W
Q101
Q103
Q102
Q104
IC101
Q106
Q105
Q107
IC102
Q108
VR101
VR151
VR152

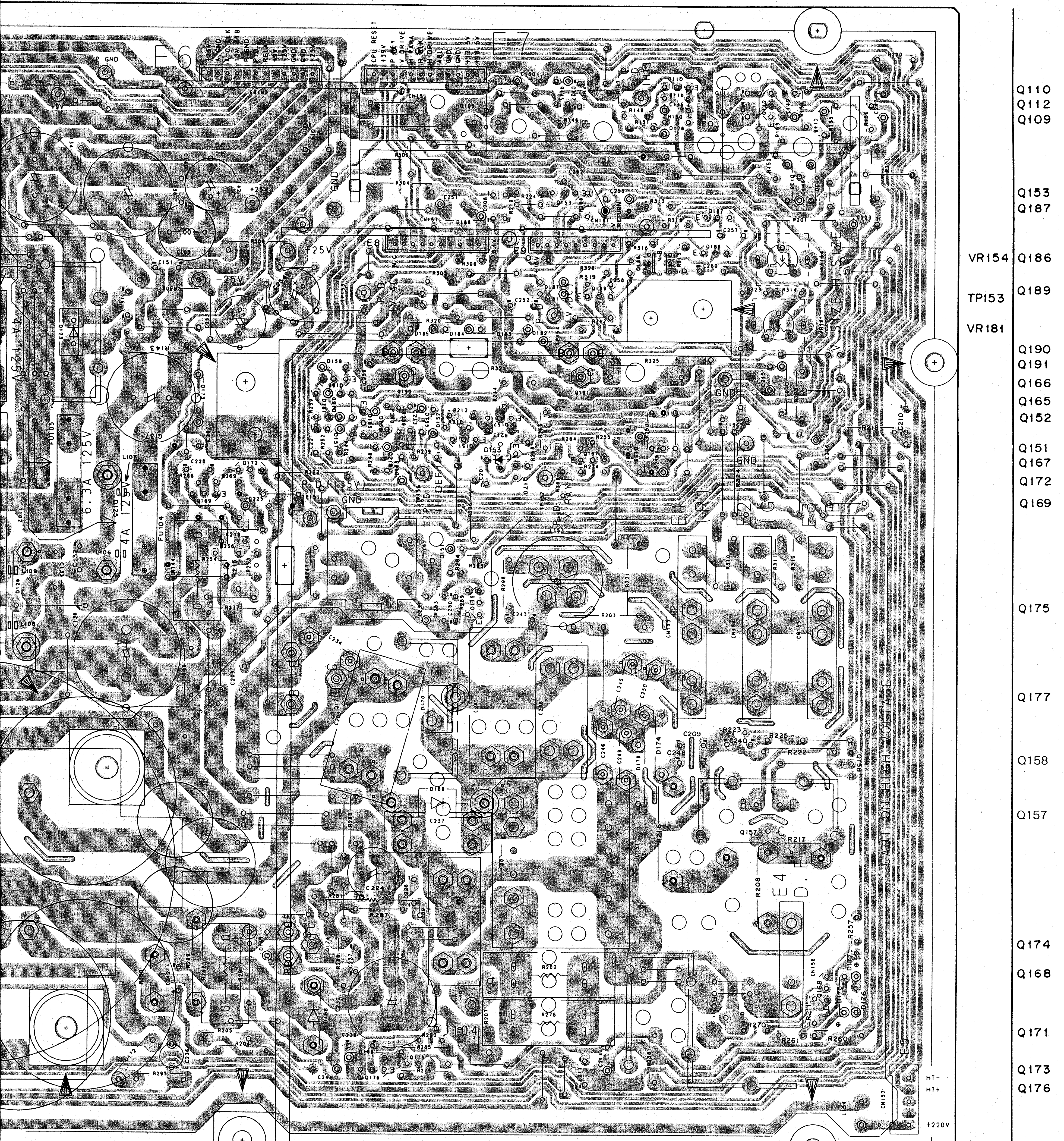

YG-M3
ANP15
V1
V2
V3
GND
ATTENTION
-UTILISER UN
FUSIBLE D
DE MÊME T
CAUTION- FOR CONTINUED PROTECT
REPLACEMENT FUSE SHOULD BE

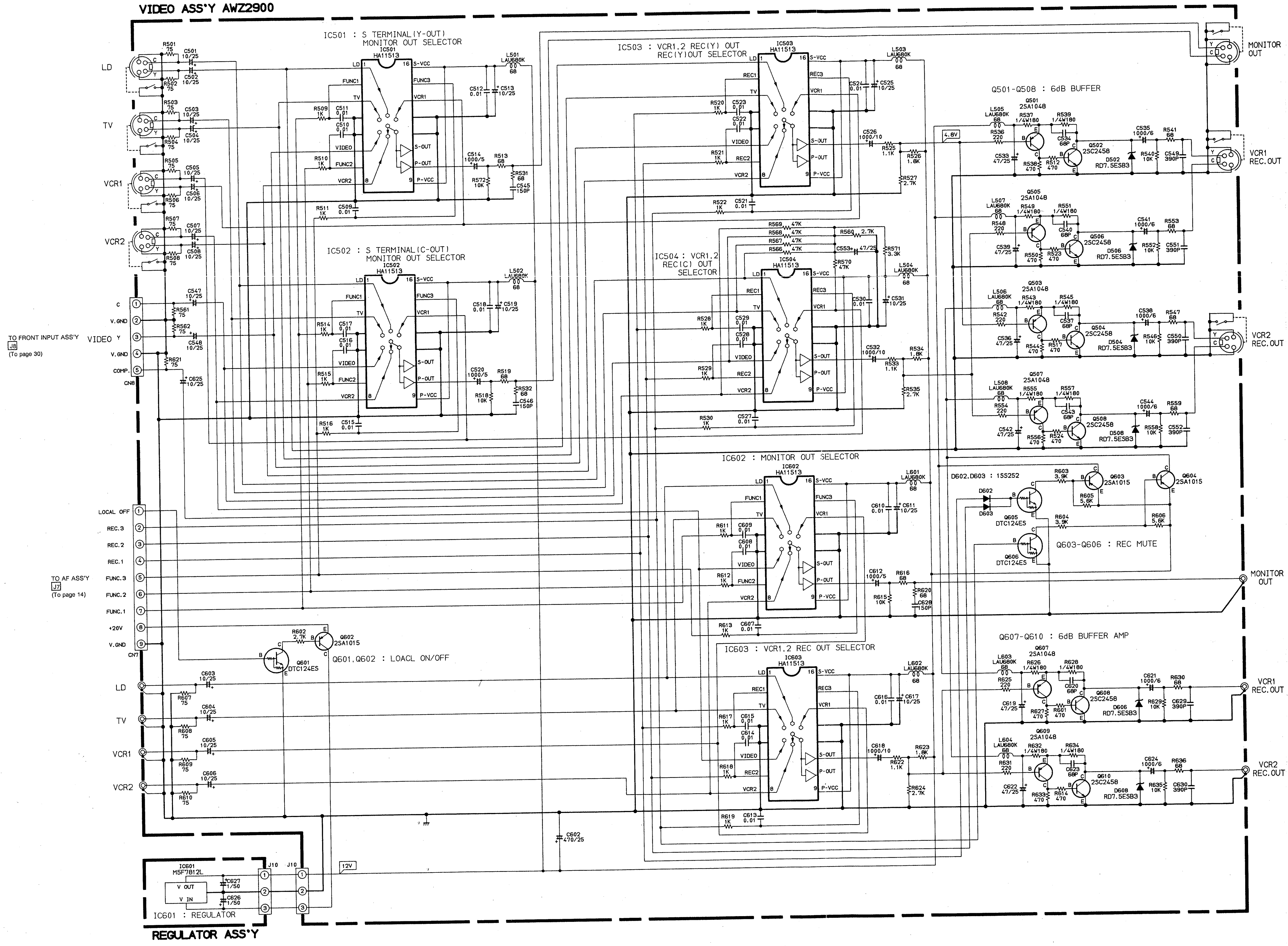
☆POWER SUPPLY ASSEMBLY
(AWV1295)

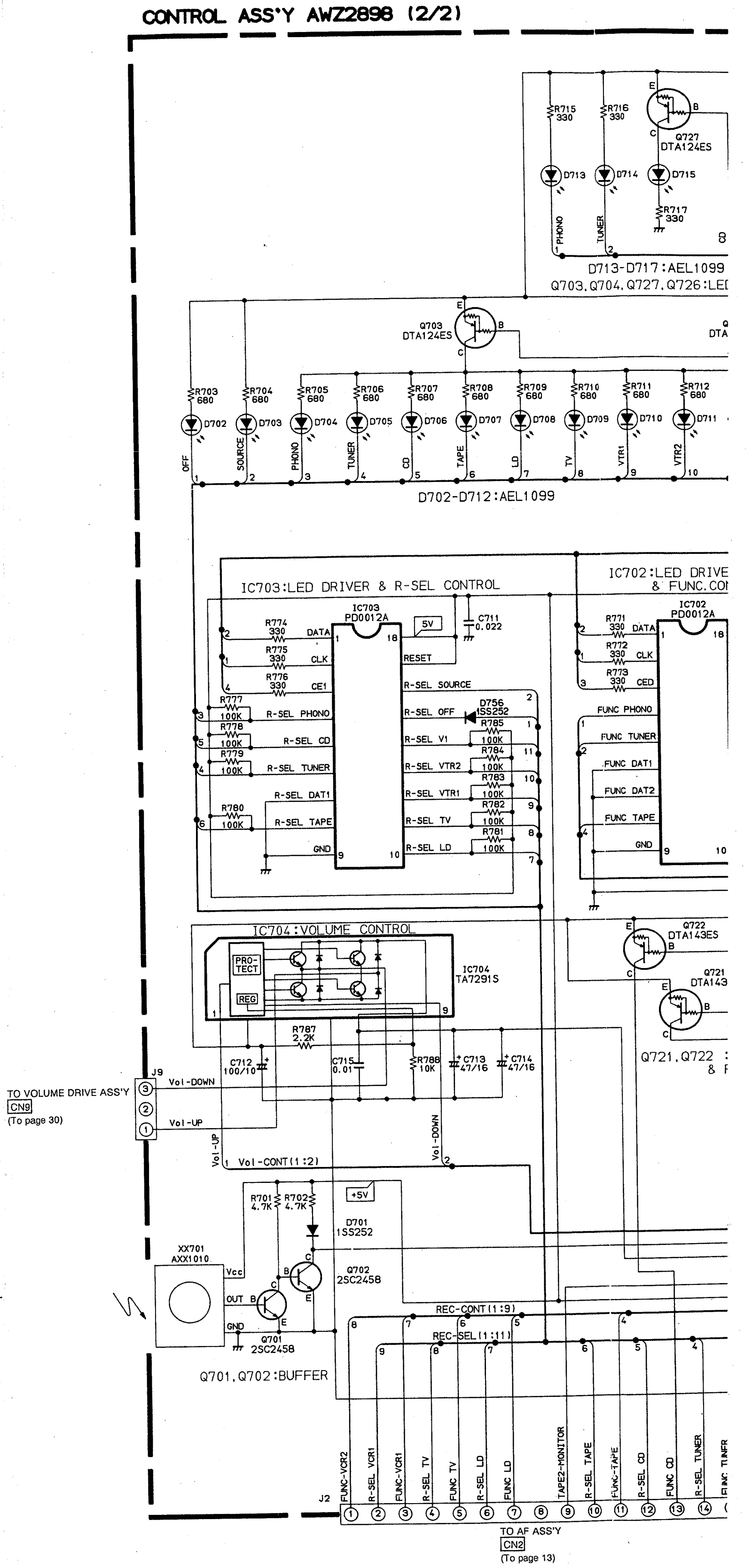

Q101
Q103
Q102
Q104
IC101
Q106
Q105
Q107
IC102
Q108
VR101
VR151
VR152
CAUTION
FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE
AND
RATINGS ONLY
E12
6.3A 125V
4A 125V
+135V ADJ
+135V
+220V
GND
+25
+135
X-RAY
YG-M3
AWV
ANP1562-D KU KC S ONL

LINE FILTER ASSEMBLY
(AWT1010)

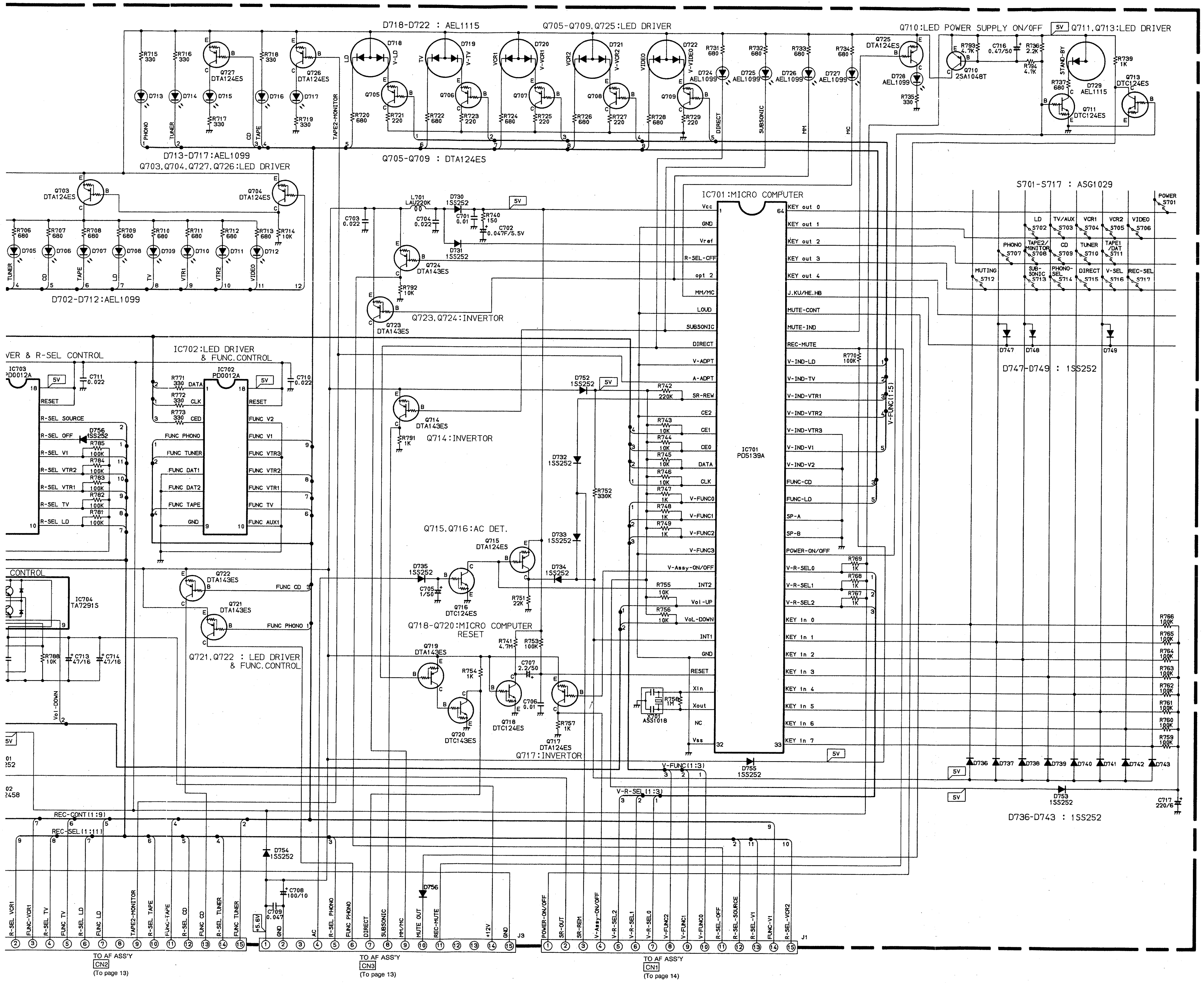

ANP1594-B
J112
J111
8A 125V
S ONLY
AWT
-FUSIBLE DE RECHANGE
DE MÊME TYPE.
UED PROTECTION AGAINST FIRE HAZARD.
SHOULD BE OF THE SAME TYPE AND RATING ONLY.


+35V
A.GND
A.C.CLK
12V STB
P.GND
P.D.
RELAY
+9V
+25V
GND
GND
+125V
CPU RESET
+39V
P KEY
V DRIVE
H PARA
H BLK
H DRIVE
ABL
GND
GND
+13.5V
+13.5V
P GND
GND
+25V
-25V
6.3A 125V
4A 125V
FU105
FU104
P.D. (H.DEF)
P.D. (X RAY)
P.D. (V.DEF)
P.D. V.AC N.C
RETURN
V SIZE
H SIZE
GND
E4
D.F
CAUTION HIGH VOLTAGE
S ONLY
HT-
HT+
+220V
VR154
TP153
VR181
Q110
Q112
Q109
Q153
Q187
Q186
Q189
Q190
Q191
Q166
Q165
Q152
Q151
Q167
Q172
Q169
Q175
Q177
Q158
Q157
Q174
Q168
Q171
Q173
Q176

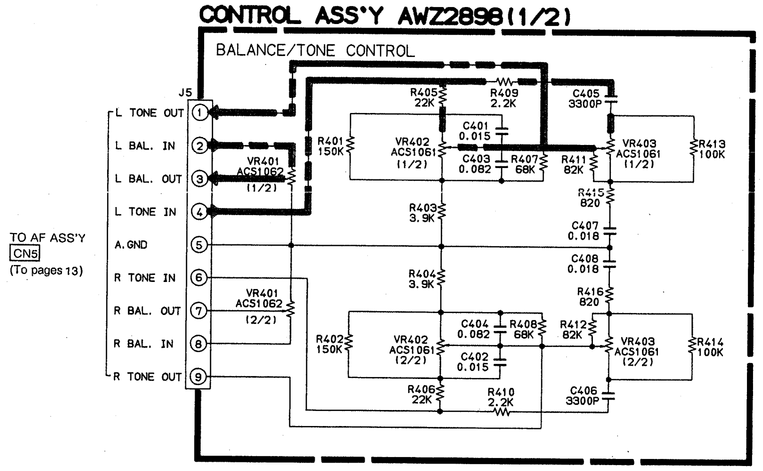

VIDEO ASS'Y AWZ2900
REGULATOR ASS'Y
IC501 : S TERMINAL(Y-OUT) MONITOR OUT SELECTOR
IC502 : S TERMINAL(C-OUT) MONITOR OUT SELECTOR
IC503 : VCR1,2 REC(Y) OUT REC(Y)OUT SELECTOR
IC504 : VCR1,2 REC(C) OUT SELECTOR
IC602 : MONITOR OUT SELECTOR
IC603 : VCR1,2 REC OUT SELECTOR
HA11513
Q501-Q508 : 6dB BUFFER
Q601,Q602 : LOACL ON/OFF
Q603-Q606 : REC MUTE
D602,D603 : 1SS252
Q607-Q610 : 6dB BUFFER AMP
IC601 : REGULATOR
IC601 M5F7812L
V OUT
V IN
12V
4.8V
LD
TV
VCR1
VCR2
MONITOR OUT
VCR1 REC.OUT
VCR2 REC.OUT
TO FRONT INPUT ASS'Y
J8
(To page 30)
VIDEO
CN8
C
V.GND
Y
COMP.
TO AF ASS'Y
J7
(To page 14)
LOCAL OFF
REC.3
REC.2
REC.1
FUNC.3
FUNC.2
FUNC.1
+20V
CN7
J10


CONTROL ASS'Y AWZ2898 (2/2)
D713-D717:AEL1099
Q703,Q704,Q727,Q726
D702-D712:AEL1099
IC703:LED DRIVER & R-SEL CONTROL
IC703 PD0012A
IC702:LED DRIVER & FUNC.CON
IC702 PD0012A
IC704:VOLUME CONTROL
IC704 TA7291S
PRO-TECT
REG
Q721,Q722
Q701,Q702:BUFFER
XX701 AXX1010
D701 1SS252
TO VOLUME DRIVE ASS'Y
CN9
(To page 30)
J9
Vol-DOWN
Vol-UP
Vol-CONT(1:2)
REC-CONT(1:9)
REC-SEL(1:11)
+5V
OFF
SOURCE
PHONO
TUNER
CD
TAPE
LD
TV
VTR1
VTR2
J2
TO AF ASS'Y
CN2
(To page 13)

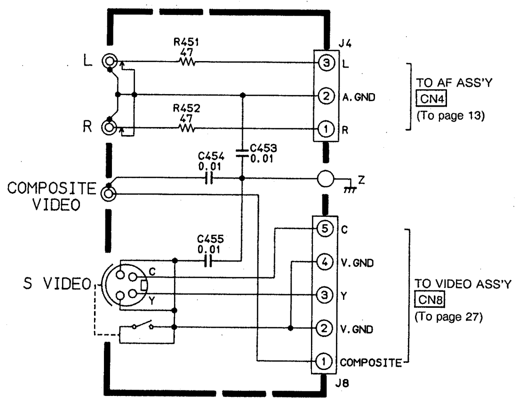
Z2898 (2/2)


D718-D722 : AEL1115
Q705-Q709,Q725:LED DRIVER
Q710:LED POWER SUPPLY ON/OFF
Q711,Q713:LED DRIVER
D713-D717:AEL1099
Q703,Q704,Q727,Q726:LED DRIVER
Q705-Q709 : DTA124ES
D702-D712:AEL1099
IC701:MICRO COMPUTER
IC701 PD5139A
S701-S717 : ASG1029
D747-D749 : 1SS252
Q723,Q724:INVERTOR
IC702:LED DRIVER & FUNC.CONTROL
Q714:INVERTOR
Q715,Q716:AC DET.
Q718-Q720:MICRO COMPUTER RESET
Q717:INVERTOR
Q721,Q722 : LED DRIVER & FUNC.CONTROL
IC704 TA7291S
D736-D743 : 1SS252
TO AF ASS'Y CN2 (To page 13)
TO AF ASS'Y CN3 (To page 13)
TO AF ASS'Y CN1 (To page 14)
J3
J1

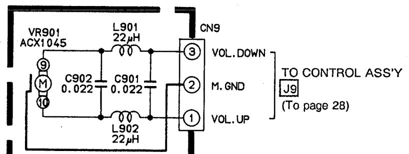
CONTROL ASS'Y AWZ2898(1/2)


BALANCE/TONE CONTROL
J5
L TONE OUT
L BAL. IN
L BAL. OUT
L TONE IN
A.GND
R TONE IN
R BAL. OUT
R BAL. IN
R TONE OUT
TO AF ASS'Y CN5 (To pages 13)
VR401 ACS1062 (1/2)
VR401 ACS1062 (2/2)
VR402 ACS1061 (1/2)
VR402 ACS1061 (2/2)
VR403 ACS1061 (1/2)
VR403 ACS1061 (2/2)

FRONT INPUT ASS'Y


L
R
COMPOSITE VIDEO
S VIDEO
R451 47
R452 47
C454 0.01
C453 0.01
C455 0.01
J4
J8
TO AF ASS'Y CN4 (To page 13)
TO VIDEO ASS'Y CN8 (Top page 27)
A.GND
V.GND
COMPOSITE

VOLUME DRIVE ASS'Y


VR901 ACX1045
L901 22μH
L902 22μH
C902 0.022
C901 0.022
CN9
VOL.DOWN
M.GND
VOL.UP
TO CONTROL ASS'Y J9 (To page 28)

3.2 P.C.B's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56 × 10¹ 561..........................RD1/4PS 5 6 1 J
47kΩ 47 × 10³ 473..........................RD1/4PS 4 7 3 J
0.5Ω 0R5..RN2H 0 R 5 K
1Ω 010..RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562 × 10¹ 5621........................RN1/4SR 5 6 2 1 F

POWER ASS'Y

Mark.	No.	Description	Parts No.
	SEMICONDUCTORS		
	Q801	TRANSISTOR	DTC143ES
	D803	ZENER DIODE	RD5.1ESB
	D804	DIODE	1SS252
	CAPACITORS		
⚠	C351,C352	CKA(0.01/AC400V)	ACG1002
	RESISTORS		
	R801-R803	CARBON FILM RESISTOR	RD1/8PM☐☐☐J
	OTHERS		
⚠	RY351	RELAY	ASR-512
		JACK(CONTROL)	AKN1006
		AC OUTLET(3P)	AKP1053

FRONT INPUT ASS'Y

Mark.	No.	Description	Parts No.
	CAPACITORS		
	C453-C455	CERAMIC CAPACITOR	CKDYF103Z50
	RESISTORS		
	R451,R452	CARBON FILM RESISTOR	RD1/8PM470J
	OTHERS		
		PIN JACK(1P)(AUDIO)	AKB1082
		PIN JACK(1P)(VIDEO)	AKB1083
		SOCKET(S-VIDEO)	AKP1067

VOLUME DRIVE ASS'Y

Mark.	No.	Description	Parts No.
	CAPACITORS		
	C901,C902	CERAMIC CAPACITOR	CKCYF223Z50
	COILS & FILTERS		
	L901,L902	AXIAL INDUCTOR	LAU220K
	RESISTOR		
	VR901	VOLUME CONTROL(MOTOR)	ACX1045
	OTHERS		
	CN9	CONNECTOR(3P)	KPE3

REGULATOR ASS'Y

Mark.	No.	Description	Parts No.
	SEMICONDUCTORS		
	IC601	REGULATOR IC	M5F7812L
	CAPACITORS		
	C626,C627	ELECTR. CAPACITOR	CEHAQ010M50

VIDEO ASS'Y (AWZ2900)

Mark.	No.	Description	Parts No.
	SEMICONDUCTORS		
	IC501-IC504	5CH VIDEO-SW IC	HA11513
	IC602,IC603	5CH VIDEO-SW IC	HA11513
	Q501	TRANSISTOR	2SA1048
	Q502	TRANSISTOR	2SC2458
	Q503	TRANSISTOR	2SA1048
	Q504	TRANSISTOR	2SC2458
	Q505	TRANSISTOR	2SA1048
	Q506	TRANSISTOR	2SC2458
	Q507	TRANSISTOR	2SA1048
	Q508	TRANSISTOR	2SC2458
	Q601	TRANSISTOR	DTC124ES
	Q602-Q604	TRANSISTOR	2SA1515
	Q605,Q606	TRANSISTOR	DTC124ES
	Q607	TRANSISTOR	2SA1048
	Q608	TRANSISTOR	2SC2458
	Q609	TRANSISTOR	2SA1048
	Q610	TRANSISTOR	2SC2458
	D502	ZENER DIODE	RD7.5ESB3
	D504	ZENER DIODE	RD7.5ESB3
	D506	ZENER DIODE	RD7.5ESB3
	D508	ZENER DIODE	RD7.5ESB3
	D602,D603	DIODE	1SS252
	D606	ZENER DIODE	RD7.5ESB3
	D608	ZENER DIODE	RD7.5ESB3
	COILS & FILTERS		
	L501-L508	AXIAL INDUCTOR	LAU680K
	L601-L604	AXIAL INDUCTOR	LAU680K

CAPACITORS

Mark.	No.	Description	Parts No.
	C501-C508	ELECTR. CAPACITOR	CEAS100M25
	C509-C512	CERAMIC CAPACITOR	CKDYF103Z50
	C513	ELECTR. CAPACITOR	CEAS100M25
	C514	ELECTR. CAPACITOR	CEAS102M6
	C515-C518	CERAMIC CAPACITOR	CKDYF103Z50
	C519	ELECTR. CAPACITOR	CEAS100M25
	C520	ELECTR. CAPACITOR	CEAS102M6
	C521-C524	CERAMIC CAPACITOR	CKDYF103Z50
	C525	ELECTR. CAPACITOR	CEAS100M25
	C526	ELECTR. CAPACITOR	CEAS101M10
	C527-C530	CERAMIC CAPACITOR	CKDYF103Z50
	C531	ELECTR. CAPACITOR	CEAS100M25
	C532	ELECTR. CAPACITOR	CEAS101M10
	C533	ELECTR. CAPACITOR	CEAS470M25
	C534	CERAMIC CAPACITOR	CCDSL680J50
	C535	ELECTR. CAPACITOR	CEAS102M6
	C536	ELECTR. CAPACITOR	CEAS470M25
	C537	CERAMIC CAPACITOR	CCDSL680J50
	C538	ELECTR. CAPACITOR	CEAS102M6
	C539	ELECTR. CAPACITOR	CEAS470M25
	C540	CERAMIC CAPACITOR	CCDSL680J50
	C541	ELECTR. CAPACITOR	CEAS102M6
	C542	ELECTR. CAPACITOR	CEAS470M25
	C543	CERAMIC CAPACITOR	CCDSL680J50
	C544	ELECTR. CAPACITOR	CEAS102M6
	C545,C546	CERAMIC CAPACITOR	CCDSL151J50
	C547,C548	ELECTR. CAPACITOR	CEAS100M25
	C549-C552	CERAMIC CAPACITOR	CKDYB391K50
	C553	ELECTR. CAPACITOR	CEAS470M25
	C602	ELECTR. CAPACITOR	CEAS471M25
	C603-C606	ELECTR. CAPACITOR	CEAS100M25
	C607-C610	CERAMIC CAPACITOR	CKDYF103Z50
	C611	ELECTR. CAPACITOR	CEAS100M25
	C612	ELECTR. CAPACITOR	CEAS102M6
	C613-C616	CERAMIC CAPACITOR	CKDYF103Z50
	C617	ELECTR. CAPACITOR	CEAS100M25
	C618	ELECTR. CAPACITOR	CEAS101M10
	C619	ELECTR. CAPACITOR	CEAS470M25
	C620	CERAMIC CAPACITOR	CCDSL680J50
	C621	ELECTR. CAPACITOR	CEAS102M6
	C622	ELECTR. CAPACITOR	CEAS470M25
	C623	CERAMIC CAPACITOR	CCDSL680J50
	C624	ELECTR. CAPACITOR	CEAS102M6
	C625	ELECTR. CAPACITOR	CEAS100M25
	C628	CERAMIC CAPACITOR	CCDSL151J50
	C629,C630	CERAMIC CAPACITOR	CKDYB391K50

RESISTORS

Mark.	No.	Description	Parts No.
	R537	CARBON FILM RESISTOR	RD1/4PM□□□J
	R539	CARBON FILM RESISTOR	RD1/4PM□□□J
	R543	CARBON FILM RESISTOR	RD1/4PM□□□J
	R545	CARBON FILM RESISTOR	RD1/4PM□□□J
	R549	CARBON FILM RESISTOR	RD1/4PM□□□J
	R551	CARBON FILM RESISTOR	RD1/4PM□□□J
	R555	CARBON FILM RESISTOR	RD1/4PM□□□J
	R557	CARBON FILM RESISTOR	RD1/4PM□□□J
	R626	CARBON FILM RESISTOR	RD1/4PM□□□J
	R628	CARBON FILM RESISTOR	RD1/4PM□□□J
	R632	CARBON FILM RESISTOR	RD1/4PM□□□J
	R634	CARBON FILM RESISTOR	RD1/4PM□□□J
	OTHER RESISTORS		RD1/8PM□□□J

OTHERS

Mark.	No.	Description	Parts No.
	CN7	CONNECTOR(9P)	KPC9
		PIN JACK(3P)(VCR1 IN·VCR2 IN·VCR2 OUT)	AKB1143
		PIN JACK(3P)(LD IN·TV/AUX IN·VCR1 OUT)	AKB1150
		PIN JACK(1P) (MONITOR OUT)	AKB1152
		SOCKET(4Px2, DIN) (MONITOR OUT·LD IN)	AKP1064
		SOCKET(4Px3, DIN) (TV/AUX·VCR1 IN·VCR1 OUT)	AKP1065

CONTROL ASS'Y (AWZ2898)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC701	AMP CONTROL MICOM	PD5139A
	IC702,IC703	OUTPUT EXPANDER IC	PD0012A
	IC704	MECHANISM DRIVER IC	TA7291S
	Q701,Q702	TRANSISTOR	2SC2458
	Q703-Q709	TRANSISTOR	DTA124ES
	Q710	TRANSISTOR	2SA1048
	Q711	TRANSISTOR	DTC124ES
	Q713	TRANSISTOR	DTC124ES
	Q714	TRANSISTOR	DTA143ES
	Q715	TRANSISTOR	DTA124ES
	Q716	TRANSISTOR	DTC124ES
	Q717	TRANSISTOR	DTA124ES
	Q718	TRANSISTOR	DTC124ES
	Q719	TRANSISTOR	DTA143ES
	Q720	TRANSISTOR	DTC143ES
	Q721-Q724	TRANSISTOR	DTA143ES
	Q725-Q727	TRANSISTOR	DTA124ES
	D701	DIODE	1SS252
	D702-D717	LED(RED)	AEL1099
	D718-D722	LED(RED,AMBER)	AEL1115
	D724-D728	LED(RED)	AEL1099
	D729	LED(RED,AMBER)	AEL1115
	D730-D743	DIODE	1SS252
	D747-D749	DIODE	1SS252
	D752-D756	DIODE	1SS252

COIL & FILTER

Mark.	No.	Description	Parts No.
	L701	AXIAL INDUCTOR	LAU220K

CAPACITORS

Mark.	No.	Description	Parts No.
	C401,C402	AUDIO FILM CAPACITOR	CFTXA153J50
	C403,C404	AUDIO FILM CAPACITOR	CFTXA823J50
	C405,C406	MYLOR FILM CAPACITOR	CQMA332J50
	C407,C408	AUDIO FILM CAPACITOR	CFTXA183J50
	C701	CERAMIC CAPACITOR	CKCYF103Z50
	C702	CEA(47000/5.5V)	ACH1037
	C703,C704	CERAMIC CAPACITOR	CKDYF223Z50
	C705	ELECTR. CAPACITOR	CEJA010M50
	C706	CERAMIC CAPACITOR	CKCYF103Z50
	C707	ELECTR. CAPACITOR	CEJA2R2M50
	C708	ELECTR. CAPACITOR	CEJA101M10
	C709	CERAMIC CAPACITOR	CKCYF473Z50
	C710,C711	CERAMIC CAPACITOR	CKDYF223Z50
	C712	ELECTR. CAPACITOR	CEJA101M10
	C713,C714	ELECTR. CAPACITOR	CEJA470M16
	C715	CERAMIC CAPACITOR	CKCYF103Z50
	C716	ELECTR. CAPACITOR	CEJAR47M50
	C717	ELECTR. CAPACITOR	CEJA221M6

RESISTORS

Mark.	No.	Description	Parts No.
	VR401	VARIABLE	ACS1062
	VR402,VR403	VARIABLE(250Kx2)	ACS1061
	OTHER RESISTORS		RD1/8PM□□□J

SWITCHS

Mark.	No.	Description	Parts No.
	S701-S717	SWITCH	ASG1029

OTHERS

Mark.	No.	Description	Parts No.
	X701	CERAMIC RESONATOR	ASS1018
		REMOTE RECEIVER UNIT	AXX1010

AF ASS'Y (AWK1301)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC101	OP-AMP IC	CXA1297P
	IC201-IC205	E-SW IC	UPD6362C
	IC206-IC209	OP AMP IC	M5238PF
	IC210	OP AMP IC	CXA1297P
	IC211	IC	UPC4570C
	IC212	OP AMP IC	M5238PF
	IC301	REGULATOR IC	NJM78M56FA
	IC302	REGULATOR IC	UPC7812H
	Q101-Q104	N-FET	2SK369
	Q105-Q108	TRANSISTOR	2SC1845
	Q109	TRANSISTOR	2SA992
	Q110	TRANSISTOR	2SC1845
	Q111	TRANSISTOR	DTC143ES
	Q112	TRANSISTOR	2SC2458
	Q113	TRANSISTOR	2SA992
	Q114	TRANSISTOR	2SC1845
	Q115	TRANSISTOR	DTC143ES
	Q116	TRANSISTOR	DTA143ES
	Q117	TRANSISTOR	2SA1048
	Q118	TRANSISTOR	2SC2458
	Q119	TRANSISTOR	DTC124ES
	Q120	TRANSISTOR	DTC143ES
	Q201-Q208	TRANSISTOR	2SC2878
	Q209-Q212	TRANSISTOR	DTA143ES
	Q213-Q215	TRANSISTOR	DTC143ES
	Q216	TRANSISTOR	DTA143ES
	Q221	TRANSISTOR	DTA143ES
	Q222-Q224	TRANSISTOR	2SA1048
	Q225	TRANSISTOR	DTC143ES
	Q226	TRANSISTOR	2SC2458
	Q227	TRANSISTOR	DTA143ES
	Q228	TRANSISTOR	2SC2458
	Q301	TRANSISTOR	2SC1845
	Q302	TRANSISTOR	2SA992
	Q303	TRANSISTOR	2SC3298
	Q304	TRANSISTOR	2SC2705
	Q305-Q307	TRANSISTOR	2SC3298
	Q308,Q309	TRANSISTOR	2SA1306
	Q310	TRANSISTOR	2SA1145
	Q311,Q312	TRANSISTOR	2SA1306
	D101,D102	DIODE	1SS252
	D103,D104	ZENER DIODE	RD12ESB1
	D105-D113	DIODE	1SS252
	D201-D216	DIODE	1SS252
	D217,D218	ZENER DIODE	RD12ESB3
	D219-D223	DIODE	1SS252
	D224	ZENER DIODE	RD10ESB2
	D301-D312	DIODE	S5566
	D313-D316	DIODE	10DF2FD
	D317,D318	ZENER DIODE	RD27FB
	D319,D320	ZENER DIODE	RD18FB2
	D321,D322	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
	C101,C102	PP CAPACITOR(0.01/50V)	ACE1018
	C103,C104	PP CAPACITOR(68pF)	ACE1024
	C105,C106	PP CAPACITOR(0.01/50V)	ACE1018
	C107,C108	ELECTR. CAPACITOR	CEXANP101M25
	C109,C110	PP CAPACITOR(0.051/50V)	ACE1049
	C111,C112	PP CAPACITOR(0.015/50V)	ACE1030
	C113,C114	ELECTR. CAPACITOR	CEXANP3R3M50
	C116,C117	CERAMIC CAPACITOR	CKDYB103K50
	C118	ELECTR. CAPACITOR	CEAS100M25
	C119	CERAMIC CAPACITOR	CKDYF103Z50
	C120	ELECTR. CAPACITOR	CEAS101M16
	C125,C126	POLYESTER CAPACITOR	CQMXA472J100
	C129	ELECTR. CAPACITOR	CEANP010M50
	C223,C224	CERAMIC CAPACITOR	CCCSL680K500
	C225,C226	ELECTR. CAPACITOR	CEXA4R7M50
	C227,C228	ELECTR. CAPACITOR	CEYA100M50
	C229,C230	ELECTR. CAPACITOR	CEAS101M16
	C231,C232	ELECTR. CAPACITOR	CEYA100M50
	C233,C234	ELECTR. CAPACITOR	CEXA4R7M50
	C235,C236	ELECTR. CAPACITOR	CEXA101M25
	C237,C238	ELECTR. CAPACITOR	CEAS010M50
	C239,C240	AUDIO FILM CAPACITOR	CFTXA823J50
	C241,C242	ELECTR. CAPACITOR	CEAS100M50
	C243,C244	ELECTR. CAPACITOR	CEAS101M16
	C245,C246	ELECTR. CAPACITOR	CEXA101M25

Mark.	No.	Description	Parts No.
	C247,C248	ELECTR. CAPACITOR	CEYA470M25
	C249	ELECTR. CAPACITOR	CEAS101M16
	C250	ELECTR. CAPACITOR	CEAS010M50
	C252	CERAMIC CAPACITOR	CKCYB102K50
	C253	CERAMIC CAPACITOR	CKDYF103Z50
	C267,C268	CERAMIC CAPACITOR	CCCSL330J50
	C301	ELECTR. CAPACITOR	CEAS222M25
	C302	ELECTR. CAPACITOR	CEHAQ010M50
	C303,C304	ELECTR. CAPACITOR	CEAS222M35
	C305	ELECTR. CAPACITOR	CEAS102M25
	C306	CERAMIC CAPACITOR	CKDYF103Z50
	C307-C310	ELECTR. CAPACITOR	CEYA102M50
	C311,C312	ELECTR. CAPACITOR	CEYA101M25
	C313	ELECTR. CAPACITOR	CEHAQ010M50
	C314	ELECTR. CAPACITOR	CEAS221M16
	C315	ELECTR. CAPACITOR	CEHAQ010M50
	C316	ELECTR. CAPACITOR	CEAS221M16
	C317	ELECTR. CAPACITOR	CEAS100M50
	C318	ELECTR. CAPACITOR	CEAS220M50
	C319-C321	CKA(0.01/AC250V)	ACG1005
	C322	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark.	No.	Description	Parts No.
	VR201	VARIABLE	ACW1008
	R101-R120	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R121,R122	CARBON FILM RESISTOR	RD1/4PM□□□J
	R123-R130	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R131,R132	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R133,R134	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R155-R158	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R201-R218	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R225,R226	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R229,R230	CARBON FILM RESISTOR	RDR1/6PU□□□J
	R231,R232	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R233,R234	CARBON FILM RESISTOR	RDR1/6PU□□□J
	R235-R242	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R243-R246	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R249,R250	CARBON FILM RESISTOR	RDR1/4PM101J
	R251-R254	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R267,R268	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R269	CARBON FILM RESISTOR	RD1/4PM102J
	R271-R280	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R301,R302	FUSIBLE RESISTOR	RFA1/4PS270J
	R303-R310	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R312	CARBON FILM RESISTOR	RD1/4PM100J
	OTHER RESISTORS		RD1/8PM□□□J

OTHERS

Mark.	No.	Description	Parts No.
	CN1-CN3	CONNECTOR(15P)	KPE15
	CN5	CONNECTOR(9P)	KPC9
	CN6	CONNECTOR(5P)	KPC5
	RY101-RY103	RELAY	ASR1018
	RY201-RY205	RELAY	ASR1018

Mark.	No.	Description	Parts No.
		SCREW	ABA1027
		PIN JACK(6P)(VCR1·VCR2)	AKB1129
		PIN JACK(4P)(PRE OUT)	AKB1147
		PIN JACK(6P)(TAPE1/DAT·TAPE2/MONITOR, LD·TV/AUX·VCR1)	AKB1148
		PIN JACK(6P)(CD·TUNER·TAPE1/DAT)	AKB1149
		PIN JACK(2P)(PHONO)	AKB1151

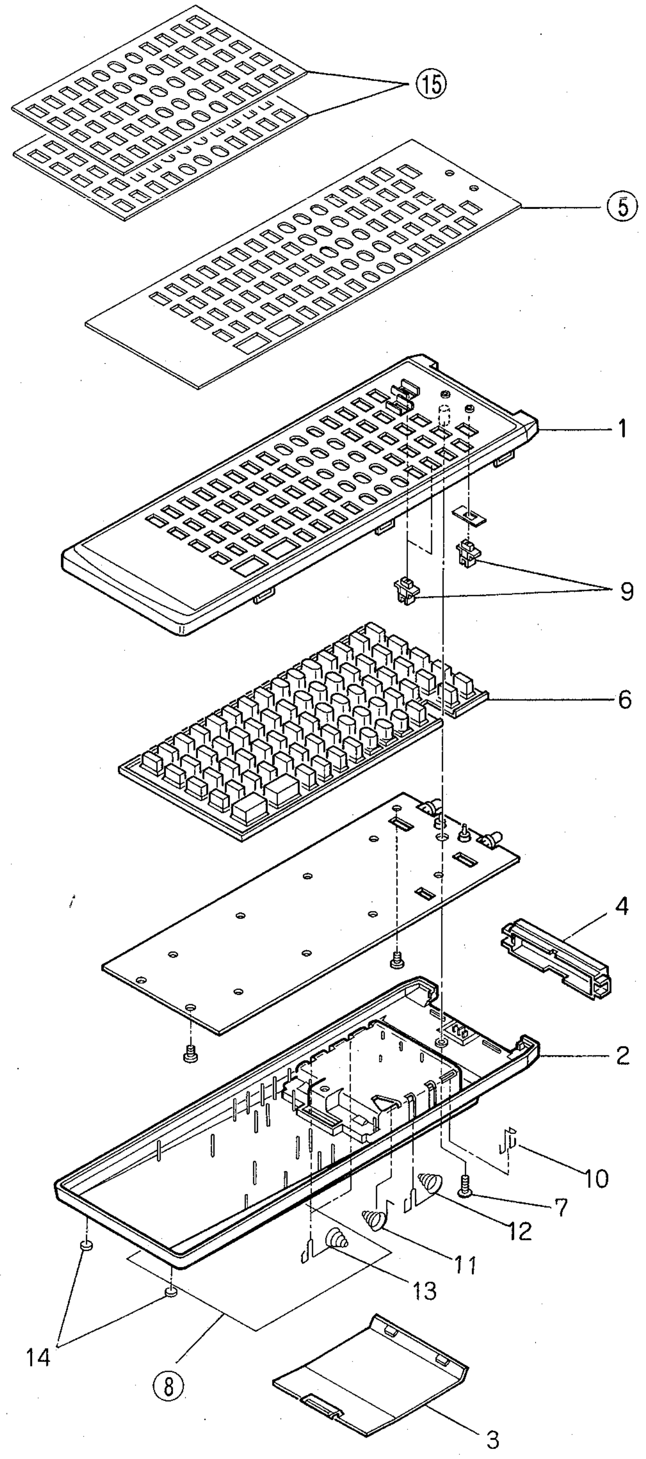
3.3 REMOTE CONTROL UNIT (AXD1171)

EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of remote control unit

Mark	No.	Description	Parts No.
	1	Case (A)	AZH1033
	2	Case (B)	AZH1034
	3	Case (C)	AZH1035
	4	Filter	AZN1400
	5	Name plate	
	6	Rubber sheet	AZA1275
	7	Screw	AZB1124
	8	Label	
	9	Knob	AZS1042
	10	Electrode spring	AZB1274
	11	Electrode spring	AZB1275
	12	Electrode spring	AZB1276
	13	Electrode spring	AZB1277
	14	Leg	AZN1401
	15	Template	



ELECTRICAL PARTS LIST

NOTES:
- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56×10^1 561..........................RD1/4PS $\boxed{5}\,\boxed{6}\,\boxed{1}$ *J*
47kΩ 47×10^3 473..........................RD1/4PS $\boxed{4}\,\boxed{7}\,\boxed{3}$ *J*
0.5Ω 0R5...RN2H $\boxed{0}\,\boxed{R}\,\boxed{5}$ *K*
1Ω 010..RS1P $\boxed{0}\,\boxed{1}\,\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562×10^1 5621........................RN1/4SR $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ *F*

SEMICONDUCTORS

Mark	Symbol & Description	Parts No.
	IC01	PD5149A
	IC02	AZC1045
	IC03	AZC1046
	IC04	AZC1047
	IC05	AZC1048
	Q01, Q02	AZC1050
	Q03, Q04	AZC1051
	Q05	AZC1052
	D01, D02, D07-D15	AZC1233
	D03-D06	AZC1049
	PHD01	AZC1055
	LED01, LED02	AZC1054
	IED01, IED02	AZC1053

SWITCHES

Mark	Symbol & Description	Parts No.
	S01, S02 Slide switch	AZC1079
	S04 Tact switch	AZC1081
	S05 Slide switch	AZC1080

CAPACITORS

Mark	Symbol & Description	Parts No.
	C01 (220pF)	AZC1058
	C02 (33pF)	AZC1059
	C05, C06 (20pF)	AZC1060
	C08 (0.01μF)	AZC1061
	C03, C04 (0.001μF)	AZC1062
	C07 (4.7μF)	AZC1252
	C10 (100μF)	AZC1251
	C09 (1000μF)	AZC1255
	C11 (0.01μF)	AZC1063

RESISTORS

Mark	Symbol & Description	Parts No.
	R01 (32K)	AZC1064
	R02 (4.7K)	AZC1065
	R03, R08 (33K)	AZC1066
	R04 (560K)	AZC1256
	R05, R17 (10K)	AZC1068
	R06 (82K)	AZC1069
	R09 (6.8K)	AZC1070
	R10 (36K)	AZC1071
	R12 (1M)	AZC1072
	R7, R11, R30-R38 (100K)	AZC1073
	R19-R21 (2.2K)	AZC1074
	R13, R16 (680K)	AZC1075
	R15 (10K)	AZC1076
	R18, R22-R29 (47K)	AZC1077
	R14 (3.9Ω)	AZC1078

OTHERS

Mark	Symbol & Description	Parts No.
	X01 Resonator	AZC1057

SCHEMATIC DIAGRAM

NOTE:
-▭- : Indicates a chip resistor
-▮- : Indicates a chip capacitor
⊠ : Indicates a chip transistor
-▶|- : Indicates a chip diode.

1. **RESISTORS:**
   Indicated in Ω, 1/8, 1/4W, ±5% tolerance unless otherwise noted K; kΩ, M; MΩ, (F); ±1%, (G); ±2%, (K); ±10%, (M); ±20% tolerance.
2. **CAPACITORS:**
   Indicated in capacity (μF) / voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.
3. **OTHERS**
   - →; Signal route.
   - ⊘ : Adjusting point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
   - ※ marked capacitor and resistor have parts number.
   - This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
4. **SWITCHES (The underline indicates the switch position)**

S01 : AUDIO/VIDEO/AUX
S02 : SR RECALL/USE/LEARN
S05 : DECK I/DECK II
S04 : RESET

TAPE/VCR
S-1 : VCR POWER
S-2 : ● TAPE/VCR
S-3 : ❚❚ TAPE/VCR
S-4 : ⏹ / VCR CH –
S-5 : TAPE SELECT
S-6 : ◀◀
S-7 : ◀ / ANT
S-8 : ■
S-9 : ▶
S-10 : ▶▶

CD/LD
S-11 : ▶▶| / SEARCH
S-12 : ❚❚
S-13 : CD/LD POWER
S-14 : |◀◀ CHP/FR-TM
S-15 : DISC SEL DISPLAY
S-16 : ◀◀
S-17 : ■
S-18 : ▶
S-19 : ▶▶

TUNER/CD/TV/LD
S-20 : 1
S-21 : 2
S-22 : 3
S-23 : 4
S-24 : 5
S-25 : 6
S-26 : 7
S-27 : 8
S-28 : 9
S-29 : 0, 10
S-30 : 11/MEMORY
S-31 : 12/CLEAR

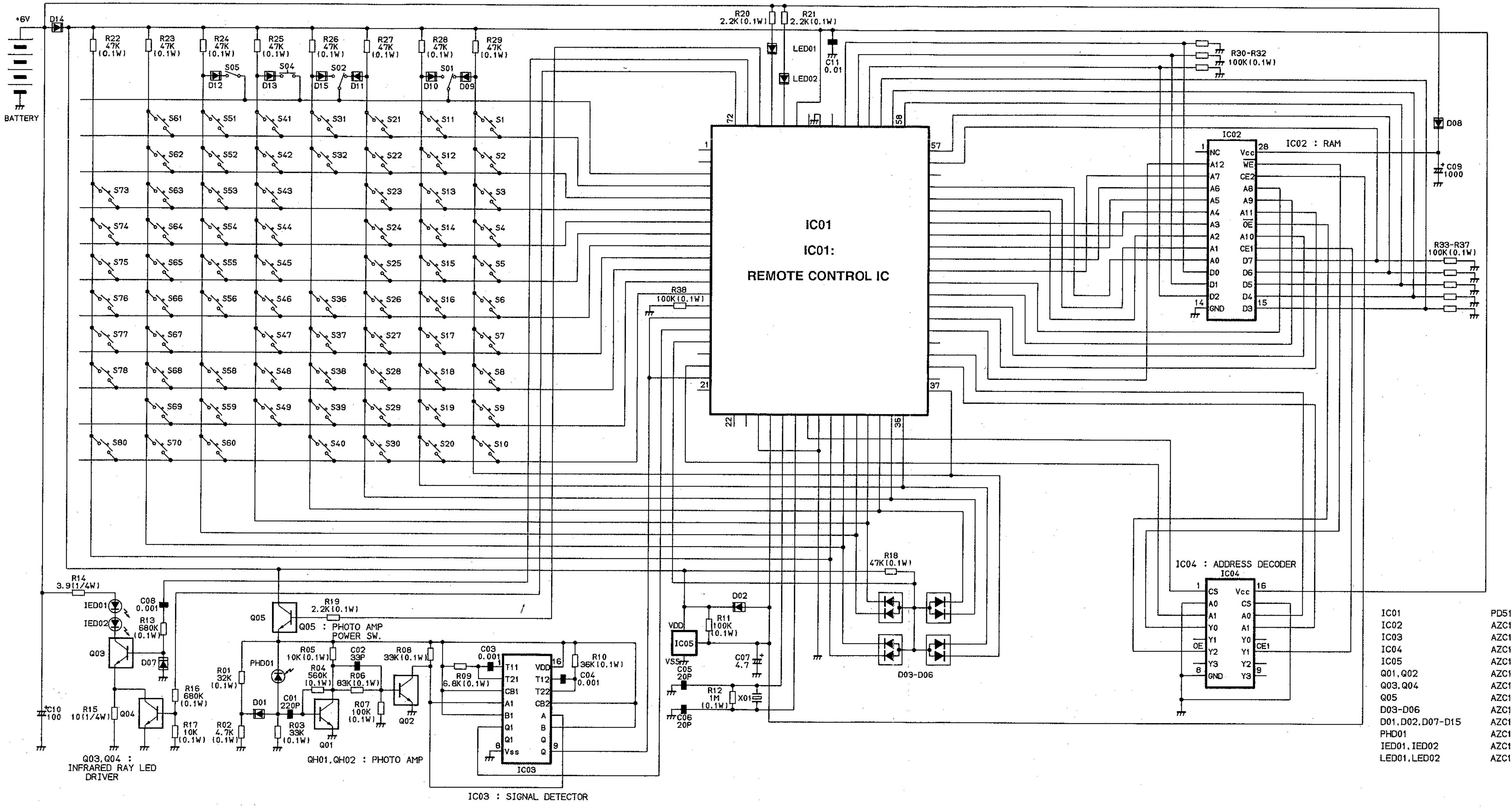
TUNER/CD/PHONO/AMP/TV
S-32 : BAND/CH-RTN

S-36 : PGM
S-37 : FREQUENCY –/TV CHANNEL –
S-38 : FREQUENCY +/TV CHANNEL +
S-39 : TV POWER
S-40 : CD + 10/TV FUNC
S-41 : PHONO■ / TV VOL –
S-42 : PHONO▶ / TV VOL +
S-43 : LD
S-44 : VIDEO
S-45 : VCR 2
S-46 : VCR 1
S-47 : TV
S-48 : TAPE 2
S-49 : TAPE 1

S-51 : TUNER
S-52 : PHONO
S-53 : DIRECT/V. SEL
S-54 : CENTER MODE
S-55 : TV DISP
S-56 : DUAL

S-58 : REAR BALANCE L
S-59 : AMP POWER
S-60 : MUTING
S-61 : PROC. LEVEL +
S-62 : CENTER LEVEL –
S-63 : VOL –
S-64 : VOL +
S-65 : MODE –
S-66 : REAR BALANCER
S-67 : CENTER LEVEL +
S-68 : PROC. ON/OFF
S-69 : PROC. LEVEL –
S-70 : REAR LEVEL +
S-73 : PROC. BALANCE R
S-74 : FUNCTION
S-75 : TEST TONE
S-76 : PROC. BALANCE L
S-77 : REAR LEVEL –
S-78 : MODE +

S-80 : CD


+6V
D14
BATTERY
R22 47K (0.1W)
R23 47K (0.1W)
R24 47K (0.1W)
R25 47K (0.1W)
R26 47K (0.1W)
R27 47K (0.1W)
R28 47K (0.1W)
R29 47K (0.1W)
S05
S04
S02
S01
D12
D13
D15
D11
D10
D09
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10
S11 S12 S13 S14 S15 S16 S17 S18 S19 S20
S21 S22 S23 S24 S25 S26 S27 S28 S29 S30
S31 S32 S36 S37 S38 S39 S40
S41 S42 S43 S44 S45 S46 S47 S48 S49
S51 S52 S53 S54 S55 S56 S58 S59 S60
S61 S62 S63 S64 S65 S66 S67 S68 S69 S70
S73 S74 S75 S76 S77 S78 S80
R20 2.2K (0.1W)
R21 2.2K (0.1W)
LED01
LED02
C11 0.01
72
1
58
57
21
37
22
36
IC01
IC01:
REMOTE CONTROL IC
R38 100K (0.1W)
R30-R32 100K (0.1W)
IC02
IC02 : RAM
NC A12 A7 A6 A5 A4 A3 A2 A1 A0 D0 D1 D2 GND
Vcc WE CE2 A8 A9 A11 OE A10 CE1 D7 D6 D5 D4 D3
28
14
15
D08
C09 1000
R33-R37 100K (0.1W)
R14 3.9 (1/4W)
IED01
IED02
C08 0.001
R13 680K (0.1W)
Q03
D07
C10 100
R15 10 (1/4W)
Q04
R16 680K (0.1W)
R17 10K (0.1W)
Q03,Q04 : INFRARED RAY LED DRIVER
Q05
R19 2.2K (0.1W)
Q05 : PHOTO AMP POWER SW.
PHD01
R01 32K (0.1W)
R02 4.7K (0.1W)
D01
R05 10K (0.1W)
R04 560K (0.1W)
C01 220P
R03 33K (0.1W)
C02 33P
R06 83K (0.1W)
R07 100K (0.1W)
R08 33K (0.1W)
Q01
Q02
QH01,QH02 : PHOTO AMP
C03 0.001
R09 6.8K (0.1W)
T11 T21 CB1 A1 B1 Q1 Q1 Vss
VDD T12 T22 CB2 A B Q Q
16
8
9
R10 36K (0.1W)
C04 0.001
IC03
IC03 : SIGNAL DETECTOR
VDD
IC05
VSS
C05 20P
C06 20P
D02
R11 100K (0.1W)
C07 4.7
R12 1M (0.1W)
X01
R18 47K (0.1W)
D03-D06
IC04 : ADDRESS DECODER
IC04
CS A0 A1 Y0 Y1 Y2 Y3 GND
Vcc CS A0 A1 Y0 Y1 Y2 Y3
OE
CE1

IC01	PD5149A
IC02	AZC1045
IC03	AZC1046
IC04	AZC1047
IC05	AZC1048
Q01,Q02	AZC1050
Q03,Q04	AZC1051
Q05	AZC1052
D03-D06	AZC1049
D01,D02,D07-D15	AZC1233
PHD01	AZC1055
IED01,IED02	AZC1053
LED01,LED02	AZC1054

P.C. BOARD PATTERN

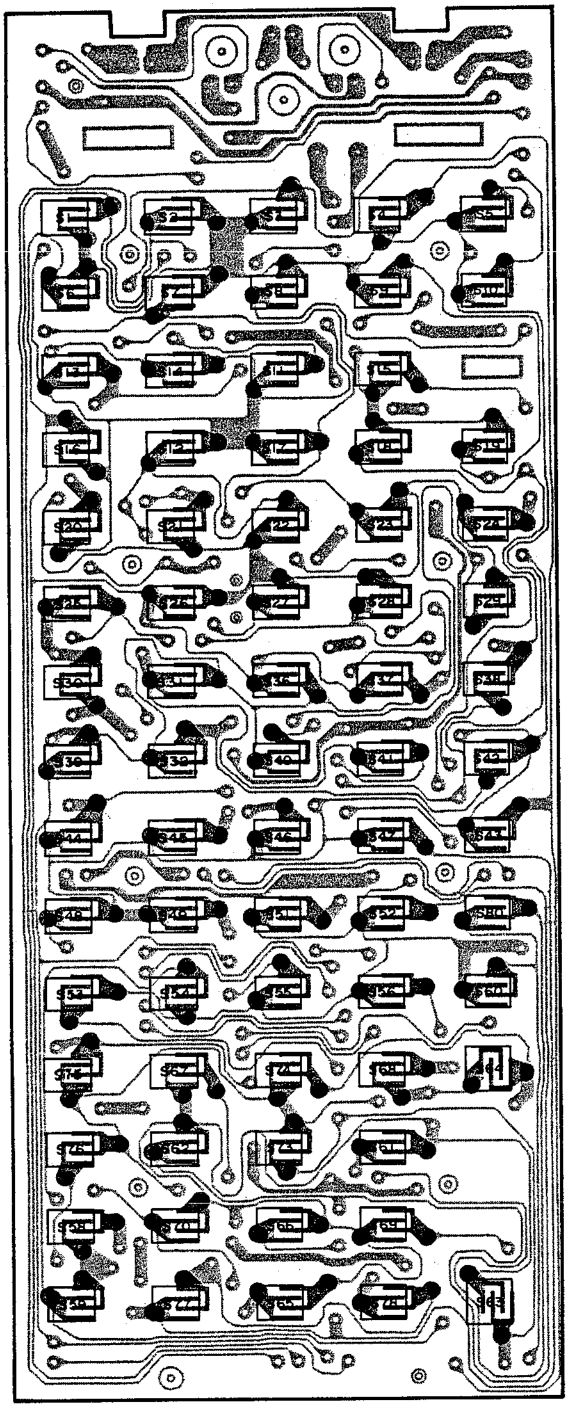
NOTE:

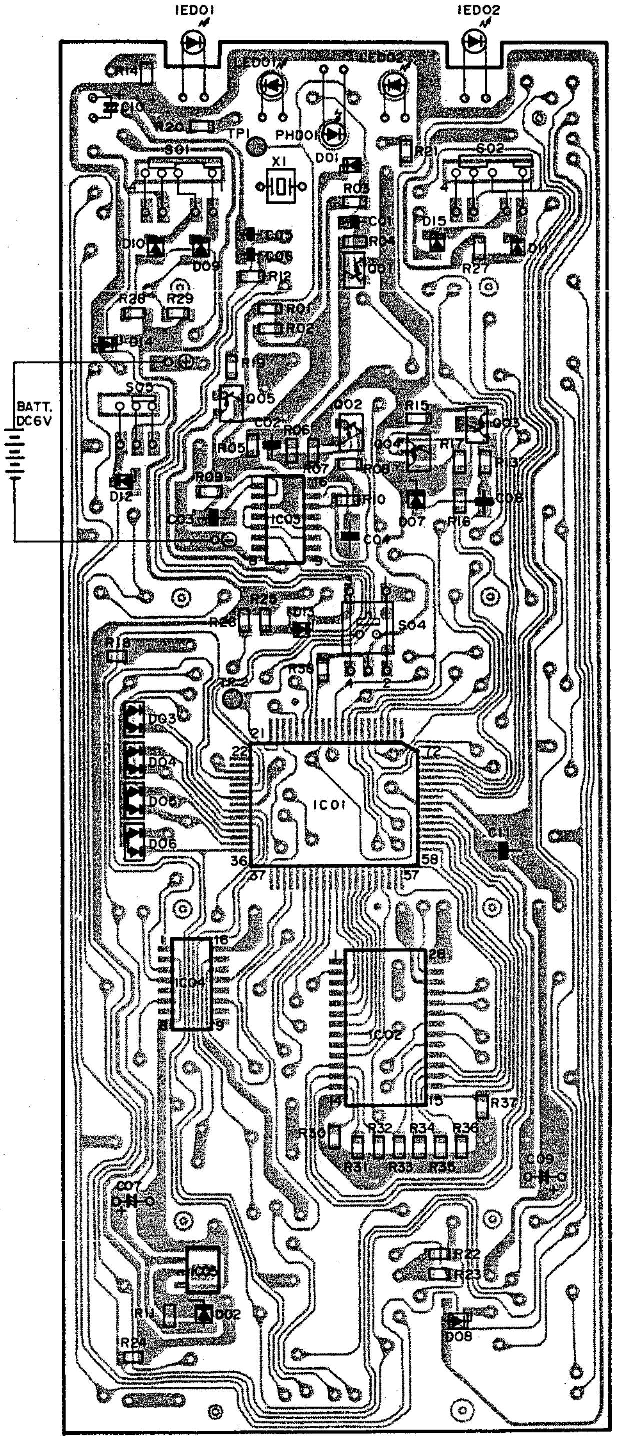
-▭- : Indicates a chip resistor

-▮- : Indicates a chip capacitor

⊠ : Indicates a chip transistor

⊣▶⊢ : Indicates a chip diode.




IED01
IED02
LED01
LED02
R14
C10
R20
TP1
PH001
D01
S01
S02
X1
R03
C01
R04
Q01
R21
D15
D11
D10
D09
C05
C06
R12
R27
R28
R29
R01
R02
D14
R19
BATT.
DC6V
S03
Q05
Q02
R15
Q03
C02
R06
R05
Q04
R17
R13
R09
R07
R08
D12
IC03
R10
D07
C08
R16
C03
C04
R25
R26
D13
S04
R18
R38
D03
D04
D05
D06
IC01
C11
IC04
IC02
R37
R30
R32
R34
R36
R31
R33
R35
C07
C09
IC05
R22
R23
R11
D02
D08
R24

3.4 SPECIFICATIONS

Amplifier Section

Rated output	
20 Hz – 20 kHz, 0.01 % 10 kΩ	7 V
Total harmonic distortion	
20 Hz – 20 kHz, 1 V	0.002 %
Input terminals (sensitivity/impedance)	
PHONO MM	2.5 mV/50 kΩ
PHONO MC	250 μV/100 Ω
CD, TUNER, TAPE PLAY, AUX	150 mV/50 kΩ
Output terminals (output level/output impedance)	
TAPE REC	150 mV/2.2 kΩ
PRE OUT	1 V/1 kΩ
Frequency response	
PHONO MM 20 Hz – 20 kHz	±0.2 dB
PHONO MC 20 Hz – 20 kHz	±0.3 dB
CD, TUNER, TAPE PLAY, AUX, 1 Hz – 150 kHz	$^{+0}_{-3}$ dB
Tone control (Volume control set at −40 dB position)	
BASS	±8 dB, 100 Hz
TREBLE	±8 dB, 10 kHz
Filter	
SUBSONIC	17 Hz, −12 dB/oct
MUTING	−∞ dB
SN ratio (short-circuit, A network)	
PHONO MM	93 dB (5 mV)
PHONO MC	76 dB (500 μV)
CD, TUNER, TAPE PLAY, AUX	106 dB

Video section

Video (Base Band)	
Input terminals (Output level/impedance)	
LD, VCR 1, 2, VIDEO, TV/AUX	1 Vp-p/75 Ω unbalanced
Output terminals (Output level/impedance)	
VCR 1, 2, REC MONITOR	1 Vp-p/75 Ω unbalanced
DG	2 %
DP	2°
Frequency response 10 Hz – 10 MHz	$^{+0}_{-3}$ dB
Noise level	−60 dB or less

S type terminal

Input terminal (luminance signals sensitivity/impedance, color signals sensitivity/impedance)	
LD, VCR 1, 2, VIDEO, TV/AUX	1 Vp-p/75 Ω unbalanced 0.286 Vp-p/75 Ω unbalanced
Output terminal (luminance signals output level/impedance, color signals output level/impedance)	
VCR 1, 2, MONITOR	1 Vp-p/75 Ω unbalanced 0.286 Vp-p/75 Ω unbalanced
Luminance signals frequency characteristic 10 Hz – 10 MHz	$^{+0}_{-3}$ dB
Noise level (luminance signal)	max. −60 dB

Power section, other

Power requirements	AC 120 V, 60 Hz
Power consumption	30 W
AC outlets	
SWITCHED	TOTAL 900 W MAX
UNSWITCHED	TOTAL 100 W MAX
External dimensions	459 (W) x 417 (D) x 163 (H) mm 18-1/16 (W) x 16-7/16 (D) x 6-7/16 (H) in
Weight	11.3 kg (24 lb 15 oz)

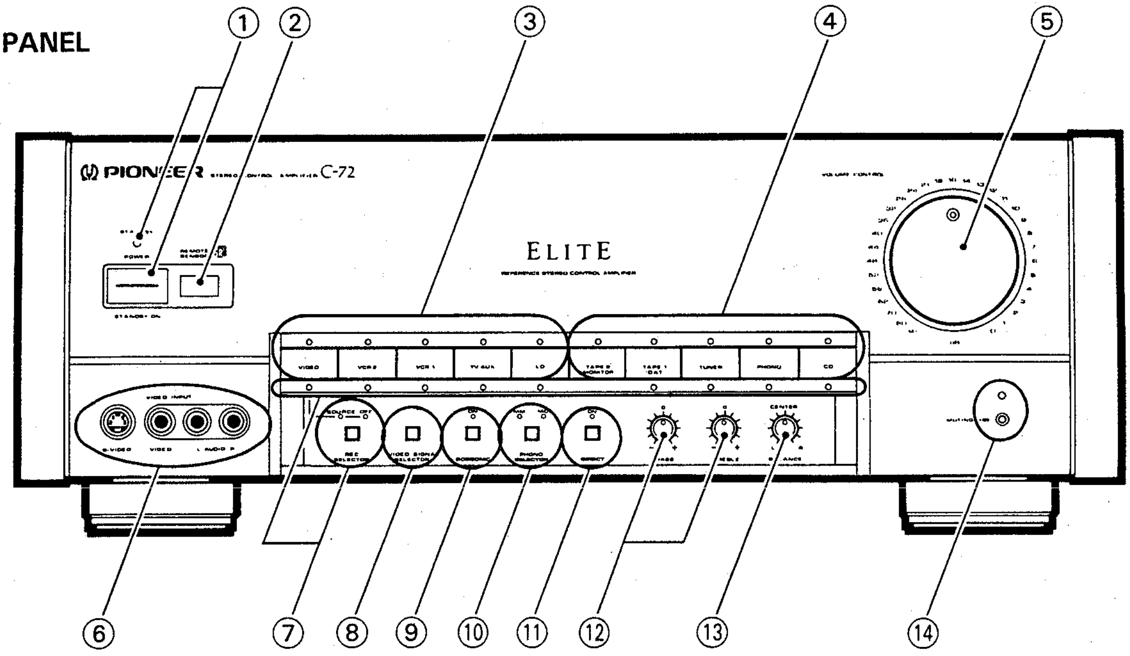
Accessories

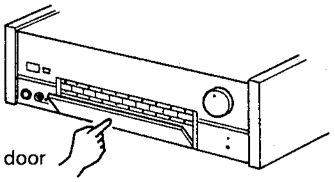
Remote control unit	1
Alkaline dry cell batteries (IEC LR03 (AM-4))	4
Templates added	2
Pin-plug cord	1
Cushion spacer	2
Operating Instructions	1

The specifications and design noted above are subject to change without notice, due to improvements.

3.5 PANEL FACILITIES

FRONT PANEL





Press the top part of the door in the center to open.

① POWER STANDBY/ON switch/indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational. The STANDBY indicator is off.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. At this time the STANDBY indicator is on.

② REMOTE SENSOR

③ VIDEO INPUT selector buttons/indicators

Use to select the video component for play back.

[VIDEO]:	To play back the video equipment connected to the front panel VIDEO INPUT terminals.
[VCR 2]:	To play back the VCR connected to the rear panel VCR 2 terminals.
[VCR 1]:	To play back the VCR connected to the rear panel VCR 1 terminals.
[TV/AUX]:	To use the TV tuner or a monitor TV connected to the rear panel TV/AUX terminals.
[LD]:	To play back the video disc player connected to the rear panel LD terminals.

- The red indicator above the button lights to show the selected video source.
- When selecting with the VIDEO SIGNAL SELECTOR button ⑧, an yellow indicator above the button lights.
- The indicator under the button lights when selection is made with the REC SELECTOR button ⑦.

④ AUDIO INPUT selector buttons/indicators

Use to select the audio component for playback.

[TAPE 2 MONITOR]:	To use the cassette deck connected to the rear panel TAPE 2 MONITOR terminals.
[TAPE 1/DAT]:	To use the cassette deck connected to the rear panel TAPE 1/DAT terminals.
[TUNER]:	For listening to FM/AM broadcasts with a tuner.
[PHONO]:	For turntable.
[CD]:	For compact disc player.

- The TAPE 2 MONITOR button go ON or OFF alternately each time they are pressed, independently of the other buttons.
- The red indicator above the button lights to show the selected audio source.
- The indicator under the button lights when selection is made with the REC SELECTOR button ⑦.

⑤ VOLUME CONTROL

Use to adjust the sound volume. At the [– ∞] position, sound will not be heard, while at the [0] position, sound volume will be at its maximum.

⑥ VIDEO INPUT terminals

Video components such as a video camera can be connected here.

AUDIO:	Connect to the video component's audio output terminals.
VIDEO:	Connect to the video component's video output terminal.
S-VIDEO:	Connect to the video component's S-VIDEO OUT terminal.

⑦ REC SELECTOR button/indicators

Use to select the playback source component used when performing audio and video recording. The audio and video signals (in the case of an audio component) from the select component will be output from the OUTPUT terminals. When set to SOURCE (indicator lights), the signals selected with the audio or video input selector switch will be output.

Each time you press the REC SELECTOR button, the playback source changes in sequence in the following order.

→ OFF → CD → PHONO → TUNER → TAPE 1/DAT → LD → TV/AUX
SOURCE ← VIDEO ← VCR 2 ← VCR 1 ←

NOTE:
No signal is output to the OUT (or REC) terminal of the input component selected with the recording selector switch. For example, when REC SELECTOR is used to select VCR 1, no signal will be output to the OUT terminal of VCR 1.

⑧ VIDEO SIGNAL SELECTOR button

Use to switch the video component's video signal regardless of the position of the input selector switch. The yellow indicator above the video input selector buttons to show the video signal selected with these buttons.
Each time you press the VIDEO SIGNAL SELECTOR button, the video source changes in sequence in the following order.

→ LD → TV/AUX → VCR 1 → VCR 2 → VIDEO
(OFF) ←

Even when listening to an audio component (record player, tuner, etc.), this button can be used to perform video recording and playback while continuing to listen to the audio component playback.
In the OFF position, there is no video signal from the MONITOR OUT jacks.

⑨ SUBSONIC button/indicators

When the button is pressed to the ON position, the indicator lights and the subsonic filter acts to cut out all frequencies below 17 Hz.

⑩ PHONO SELECTOR button/indicators

Set in accordance with the type of cartridge used on your record player (the corresponding indicator will light).

[MM]: Set here when using a moving magnet cartridge, or a high-output (1 mV or more) moving coil (MC) cartridge.

[MC]: Set here when using a moving coil cartridge.

⑪ DIRECT button/indicator

Use this to listen to the audio signal without routing it through subsonic, tone control (BASS, TREBLE), or balance control circuitry.

NOTE:
When the DIRECT button is in the ON position, the TAPE 2 MONITOR button and SUBSONIC button do not operate.

⑫ Tone controls

[BASS]: Use to adjust low frequency sounds.
The central [0] indicates the standard (flat) position. When the control is rotated to the right, low-frequency sounds are augmented; when rotated to the left, low-frequency sounds are attenuated.

[TREBLE]: Use to adjust high-frequency sounds.
The central [0] indicates the standard (flat) position. When the control is rotated to the right, high-frequency sounds are augmented; when rotated to the left, high-frequency sounds are attenuated.

⑬ BALANCE control

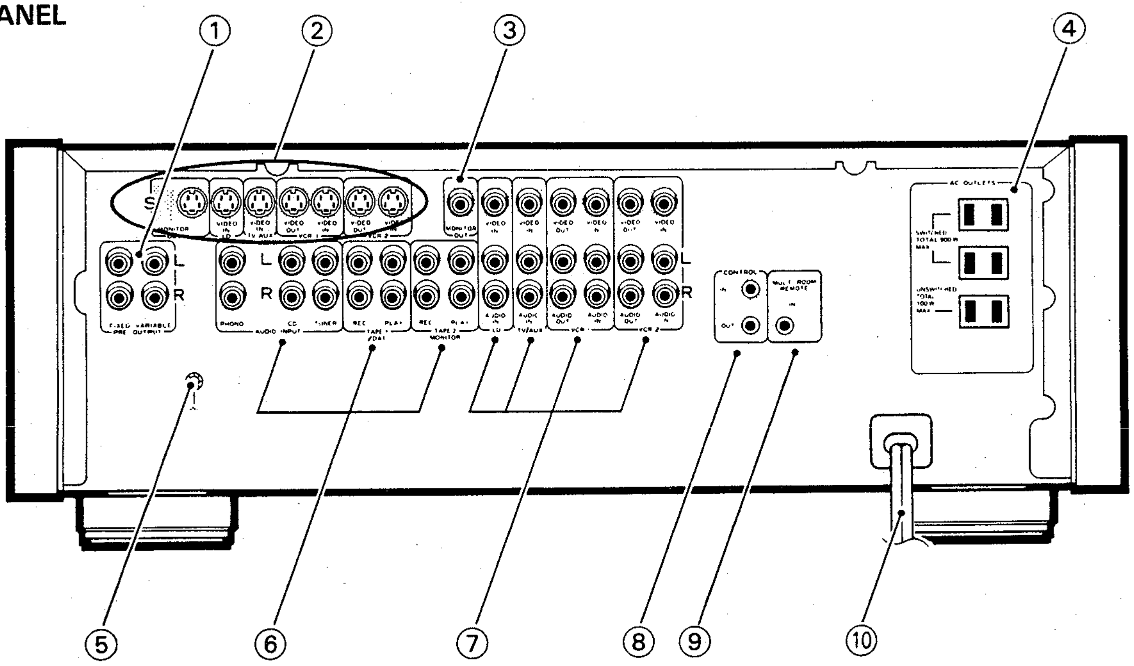
Normally leave in the center position. Use to adjust the balance of sound from right and left channels.

⑭ MUTING button/indicator

Use to temporarily cut the sound. The muting function is on when the MUTING indicator lights. Press the button again to turn the muting function off and return the sound volume to the normal level.

NOTE:
When listening at high volume levels, even if you switch MUTING ON, you will still hear a faint sound.

REAR PANEL



① PRE OUTPUT terminals

Connect to the power amplifier or surround processor input terminals.

FIXED: The output level of the signal is fixed, regardless of this unit's VOLUME CONTROL setting.
Connect to a surround processor with volume control capability.

VARIABLE: Adjust the output level of the signal with this unit's VOLUME CONTROL.
When using with a power amplifier, connect to this terminal.
When using in combination with a Pioneer M-72 stereo power amplifier, set the M-72's INPUT LEVEL control to MAX, and adjust volume level with this unit's VOLUME CONTROL.

② S VIDEO terminals

When used in conjunction with VCR 1, VCR 2, LaserDisc player or monitor TV equipped with S video terminals, connect to these terminals.

③ MONITOR OUT terminal

This terminal outputs the video playback picture from the video components connected to this unit. Connect to the video input terminal of a monitor TV or television set.

④ AC OUTLETS

SWITCHED TOTAL 900 W MAX

Power supplied through these outlets is turned on and off by this equipment's POWER switch. Total electrical power consumption of commented equipment should not exceed 900 W.
With a switched AC outlet, you can connect a separately sold M-72 power cord.

UNSWITCHED TOTAL 100 W MAX

Power flows continually to this outlet, regardless of whether this equipment is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  This can cause the control amplifier to malfunction.

CAUTION: DO NOT CONNECT TV SET OR MONITOR

⑤ Ground (GND) terminal

Connect to the ground terminal of your turntable.

⑥ Audio components terminals

[PHONO]: Turntable.
[CD]: Compact disc player.
[TUNER]: FM/AM Tuner.
[TAPE 1/DAT]: Cassette deck 1 (first deck) or DAT.
  PLAY: For playback (connect to the tape deck's PLAY terminals).
  REC: For recording (connect to the tape deck's REC terminals).
[TAPE 2 MONITOR]: Cassette deck 2 (second deck).
  PLAY: For playback. Connect to the cassette deck PLAY terminals.
  REC: For recording. Connect to the cassette deck REC terminal.

⑦ Video components terminals

Connect to the video and audio terminals of the video components you plan to use.

[LD]: LaserDisc player.
[TV]: TV Tuner.
[VCR 1]: Video cassette recorder 1 (first unit).
  IN: For input. Connect to the VCR's video and audio output terminals.
  OUT: For output. Connect to the VCR's video and audio input terminals.
[VCR 2]: Video cassette recorder 2 (second unit).
  IN: For input. Connect to the VCR's video and audio output terminals.
  OUT: For output. Connect to the VCR's video and audio input terminals.

⑧ CONTROL terminals

IN: Use a control cord to connect when performing remote operations using this unit's remote control unit in conjunction with the remote sensor on the Pioneer component display.

OUT: The control signal received at the amplifier's signal sensor from the remote control unit is output here to other components. Use a control cord to connect to other components when controlling those components with this remote control unit.

NOTE:
Control connections can be performed only when using Pioneer components bearing the SR *mark.*

⑨ MULTI-ROOM REMOTE IN terminals

Connect the multi-room remote control unit (MR-100; sold separately) to this terminal. You can operate this unit by remote control through the MR-100. It is convenient when this unit is located a separate room.

⑩ Power cord

Connect to a household wall outlet, or the power outlet of an audio timer.

4. FOR C-72/SD TYPE

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

CONTRAST OF MISCELLANEOUS PARTS

The C-72/SD type is the same as the C-72/KU/CA type with the exception of the following sections.

Mark	Symbol & Description	Parts No.		Remarks
		C-72/KU/CA type	C-72/SD type	
⚠	AC POWER CORD	ADG1076	ADG1051	
⚠	FU2 FUSE (T250mA)	------------	AEK-037	
⚠	FU3 FUSE (T250mA)	------------	AEK-037	
⚠	FU4 FUSE (T250mA)	------------	AEK-037	
⚠	FU5 FUSE (T250mA)	------------	AEK-037	
	PACKING CASE	AHD1927	AHD1926	
⚠	S1 VOLTAGE SELECT SWITCH	------------	AKX-507	
⚠	S2 VOLTAGE SELECT SWITCH	------------	AKX-507	
	FRONT PANEL	ANB1414	ANB1412	
	OPERATING INSTRUCTIONS (ENGLISH)	ARB1268	ARB1269	
⚠	T1 POWER TRANSFORMER	ATT1122	ATT1123	
⚠	T2 POWER TRANSFORMER	ATT1126	ATT1127	
	STRAIN RELIEF	------------	AEC-882	
	FRONT PANEL	ANB1414	ANB1412	
	AC CORD SPACER	ANG1153	------------	

5. FOR C-73/HEZ TYPE

5.1 P.C.B's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

560Ω *56×10^1* *561*..........................*RD1/4PS*$\boxed{5}\boxed{6}\boxed{1}$*J*
47kΩ *47×10^3* *473*..........................*RD1/4PS*$\boxed{4}\boxed{7}\boxed{3}$*J*
0.5Ω *0R5*..*RN2H*$\boxed{0}\boxed{R}\boxed{5}$*K*
1Ω *010*..*RS1P*$\boxed{0}\boxed{1}\boxed{0}$*K*

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

5.62kΩ *562×10^1* *5621*........................*RN1/4SR*$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$*F*

VOLUME DRIVE ASS'Y

OTHERS

Mark.	No.	Description	Parts No.
	VR901	GEAR BOX	ACX1046

POWER ASS'Y

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	Q801	TRANSISTOR	DTC143ES
	D804	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
⚠	C351,C352	CKA (0.01/AC400V)	ACG1002

OTHER

Mark.	No.	Description	Parts No.
⚠	RY351	RELAY	ASR1027

FRONT INPUT ASS'Y

CAPACITORS

Mark.	No.	Description	Parts No.
	C451,C452	CERAMIC CAPACITOR	CCDSL181J50
	C453	CERAMIC CAPACITOR	CKDYF103Z50

RESISTORS

Mark.	No.	Description	Parts No.
	R451,R452	CARBON FILM RESISTOR	RD1/8PM470J

OTHER

Mark.	No.	Description	Parts No.
		PIN JACK(1P)(LINE5 INPUT)	AKB1082

CONTROL ASS'Y (AWZ2899)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC701	AMP CONTROL MICOM	PD5139A
	IC702,IC703	OUTPUT EXPANDER IC	PD0012A
	Q703,Q704	TRANSISTOR	DTA124ES
	Q710	TRANSISTOR	2SA1048
	Q712,Q713	TRANSISTOR	DTC124ES
	Q714	TRANSISTOR	DTA143ES
	Q715	TRANSISTOR	DTA124ES
	Q716	TRANSISTOR	DTC124ES
	Q718	TRANSISTOR	DTC124ES
	Q719	TRANSISTOR	DTA143ES
	Q720	TRANSISTOR	DTC143ES
	Q721-Q724	TRANSISTOR	DTA143ES
	Q725-Q727	TRANSISTOR	DTA124ES
	D702-D706	LED(RED)	AEL1099
	D708-D722	LED(RED)	AEL1099
	D724-D728	LED(RED)	AEL1099
	D729	LED(RED,AMBER)	AEL1115
	D730,D731	DIODE	1SS252
	D734-D743	DIODE	1SS252
	D745	DIODE	1SS252
	D750	DIODE	1SS252
	D752-D757	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
	C401,C402	AUDIO FILM CAPACITOR	CFTXA153J50
	C403,C404	AUDIO FILM CAPACITOR	CFTXA823J50
	C405,C406	MYLOR FILM CAPACITOR	CQMA332J50
	C701	CERAMIC CAPACITOR	CKCYF103Z50
	C702	CEA(47000/5.5V)	ACH1037
	C703,C704	CERAMIC CAPACITOR	CKDYF223Z50
	C705	ELECTR. CAPACITOR	CEJA010M50
	C706	CERAMIC CAPACITOR	CKCYF103Z50
	C707	ELECTR. CAPACITOR	CEJA2R2M50
	C708	ELECTR. CAPACITOR	CEJA101M10
	C709	CERAMIC CAPACITOR	CKCYF473Z50
	C710,C711	CERAMIC CAPACITOR	CKDYF223Z50
	C716	ELECTR. CAPACITOR	CEJAR47M50
	C717	ELECTR. CAPACITOR	CEJA221M6

COILS & FILTERS

Mark.	No.	Description	Parts No.
	L701	AXIAL INDUCTOR	LAU220K

RESISTORS

Mark.	No.	Description	Parts No.
	VR401	VARIABLE	ACS1062
	VR402,VR403	VARIABLE(250K)	ACS1061
	OTHER RESISTORS		RD1/8PM□□□J

SWITCHS

Mark.	No.	Description	Parts No.
	S701-S715	SWITCH	ASG1029
	S717	SWITCH	ASG1029

OTHERS

Mark.	No.	Description	Parts No.
	X701	CERAMIC RESONATOR	ASS1018

AF ASS'Y (AWK1302)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC101	OP AMP IC	CXA1297P
	IC201-IC205	E-SW IC	UPD6362C
	IC206	OP AMP IC	M5238PF
	IC208,IC209	OP AMP IC	M5238PF
	IC210	OP AMP IC	CXA1297P
	IC211	IC	UPC4570C
	IC212	OP AMP IC	M5238PF
	IC301	REGULATOR IC	NJM78M56FA
	IC302	REGULATOR IC	UPC7812H
	Q101-Q104	N-FET	2SK369
	Q105-Q108	TRANSISTOR	2SC1845
	Q109	TRANSISTOR	2SA992
	Q110	TRANSISTOR	2SC1845
	Q111	TRANSISTOR	DTC143ES
	Q112	TRANSISTOR	2SC2458
	Q113	TRANSISTOR	2SA992
	Q114	TRANSISTOR	2SC1845
	Q115	TRANSISTOR	DTC143ES
	Q116	TRANSISTOR	DTA143ES
	Q117	TRANSISTOR	2SA1048
	Q118	TRANSISTOR	2SC2458
	Q119	TRANSISTOR	DTC124ES
	Q120	TRANSISTOR	DTC143ES
	Q201,Q202	TRANSISTOR	2SC2878
	Q209	TRANSISTOR	DTA143ES
	Q213-Q215	TRANSISTOR	DTC143ES
	Q216	TRANSISTOR	DTA143ES
	Q221	TRANSISTOR	DTA143ES
	Q222	TRANSISTOR	2SA1048
	Q225	TRANSISTOR	DTC143ES
	Q226	TRANSISTOR	2SC2458
	Q227	TRANSISTOR	DTA143ES
	Q228	TRANSISTOR	2SC2458
	Q301	TRANSISTOR	2SC1845
	Q302	TRANSISTOR	2SA992
	Q303,Q304	TRANSISTOR	2SC2705
	Q305-Q307	TRANSISTOR	2SC3298
	Q308	TRANSISTOR	2SA1145
	Q309	TRANSISTOR	2SA1306
	Q310	TRANSISTOR	2SA1145
	Q311,Q312	TRANSISTOR	2SA1306
	D101,D102	DIODE	1SS252
	D103,D104	ZENER DIODE	RD12ESB1
	D105-D113	DIODE	1SS252
	D201-C203	DIODE	1SS252
	D208-D216	DIODE	1SS252
	D217,D218	ZENER DIODE	RD12ESB3
	D219-D223	DIODE	1SS252
	D224	ZENER DIODE	RD10ESB2
	D301-D308	DIODE	S5566

Mark.	No.	Description	Parts No.
	D313-D316	DIODE	10DF2FD
	D317,D318	ZENER DIODE	RD27FB
	D319,D320	ZENER DIODE	RD18FB2
	D321,D322	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
	C101,C102	PP CAPACITOR(0.01/50V)	ACE1018
	C103,C104	CERAMIC CAPACITOR	CCDSL181J50
	C105,C106	PP CAPACITOR(0.01/50V)	ACE1018
	C107,C108	ELECTR. CAPACITOR	CEXANP101M25
	C109,C110	PP CAPACITOR(0.051/50V)	ACE1049
	C111,C112	PP CAPACITOR(0.015/50V)	ACE1030
	C113,C114	ELECTR. CAPACITOR	CEXANP3R3M50
	C115	CERAMIC CAPACITOR	CKDYF103Z50
	C116,C117	CERAMIC CAPACITOR	CKDYB103K50
	C118	ELECTR. CAPACITOR	CEAS100M25
	C119	CERAMIC CAPACITOR	CKDYF103Z50
	C120	ELECTR. CAPACITOR	CEAS101M16
	C121,C122	CERAMIC CAPACITOR	CKDYF103Z50
	C123,C124	CERAMIC CAPACITOR	CCDSL121J50
	C125,C126	POLYESTER CAPACITOR	CQMXA472J100
	C127,C128	CERAMIC CAPACITOR	CCDCH330J50
	C129	ELECTR. CAPACITOR	CEANP010M50
	C201-C204	CERAMIC CAPACITOR	CCDSL181K500
	C205,C206	CERAMIC CAPACITOR	CCDSL271K500
	C207,C208	CERAMIC CAPACITOR	CCDSL181K500
	C209,C210	CERAMIC CAPACITOR	CCDSL101K500
	C211-C220	CERAMIC CAPACITOR	CCDSL181K500
	C221,C222	CERAMIC CAPACITOR	CCDSL271K500
	C223,C224	CERAMIC CAPACITOR	CCCSL680K500
	C225,C226	ELECTR. CAPACITOR	CEXA4R7M50
	C227,C228	ELECTR. CAPACITOR	CEAS100M25
	C229,C230	ELECTR. CAPACITOR	CEAS101M16
	C233,C234	ELECTR. CAPACITOR	CEXA4R7M50
	C235,C236	ELECTR. CAPACITOR	CEXA101M25
	C237,C238	ELECTR. CAPACITOR	CEAS010M50
	C239,C240	AUDIO FILM CAPACITOR	CFTXA823J50
	C241,C242	ELECTR. CAPACITOR	CEAS100M50
	C243,C244	ELECTR. CAPACITOR	CEAS101M16
	C245,C246	ELECTR. CAPACITOR	CEXA101M25
	C247,C248	ELECTR. CAPACITOR	CEYA470M25
	C249	ELECTR. CAPACITOR	CEAS101M16
	C250	ELECTR. CAPACITOR	CEAS010M50
	C251,C252	CERAMIC CAPACITOR	CKCYF103Z50
	C253	CERAMIC CAPACITOR	CKDYF103Z50
	C255,C256	CERAMIC CAPACITOR	CCDSL330J50
	C257,C258	CERAMIC CAPACITOR	CCDSL151J50
	C259-C262	CERAMIC CAPACITOR	CCDSL101J50
	C265,C266	CERAMIC CAPACITOR	CCCSL151J50
	C267,C268	CERAMIC CAPACITOR	CCCSL330J50
	C301	ELECTR. CAPACITOR	CEAS222M25
	C302	ELECTR. CAPACITOR	CEHAQ010M50
	C305	ELECTR. CAPACITOR	CEAS102M25
	C306	CERAMIC CAPACITOR	CKDYF103Z50
	C307-C310	ELECTR. CAPACITOR	CEYA102M50
	C311,C312	ELECTR. CAPACITOR	CEYA101M25

5. FOR C-73/HEZ TYPE

5.1 P.C.B's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56×10^1 561..........................RD1/4PS 5 6 1 J
47kΩ 47×10^3 473..........................RD1/4PS 4 7 3 J
0.5Ω 0R5..RN2H 0 R 5 K
1Ω 010..RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ 562×10^1 5621........................RN1/4SR 5 6 2 1 F

VOLUME DRIVE ASS'Y

OTHERS

Mark.	No.	Description	Parts No.
	VR901	GEAR BOX	ACX1046

POWER ASS'Y

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	Q801	TRANSISTOR	DTC143ES
	D804	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
⚠	C351,C352	CKA (0.01/AC400V)	ACG1002

OTHER

Mark.	No.	Description	Parts No.
⚠	RY351	RELAY	ASR1027

FRONT INPUT ASS'Y

CAPACITORS

Mark.	No.	Description	Parts No.
	C451,C452	CERAMIC CAPACITOR	CCDSL181J50
	C453	CERAMIC CAPACITOR	CKDYF103Z50

RESISTORS

Mark.	No.	Description	Parts No.
	R451,R452	CARBON FILM RESISTOR	RD1/8PM470J

OTHER

Mark.	No.	Description	Parts No.
		PIN JACK(1P)(LINE5 INPUT)	AKB1082

CONTROL ASS'Y (AWZ2899)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC701	AMP CONTROL MICOM	PD5139A
	IC702,IC703	OUTPUT EXPANDER IC	PD0012A
	Q703,Q704	TRANSISTOR	DTA124ES
	Q710	TRANSISTOR	2SA1048
	Q712,Q713	TRANSISTOR	DTC124ES
	Q714	TRANSISTOR	DTA143ES
	Q715	TRANSISTOR	DTA124ES
	Q716	TRANSISTOR	DTC124ES
	Q718	TRANSISTOR	DTC124ES
	Q719	TRANSISTOR	DTA143ES
	Q720	TRANSISTOR	DTC143ES
	Q721-Q724	TRANSISTOR	DTA143ES
	Q725-Q727	TRANSISTOR	DTA124ES
	D702-D706	LED(RED)	AEL1099
	D708-D722	LED(RED)	AEL1099
	D724-D728	LED(RED)	AEL1099
	D729	LED(RED,AMBER)	AEL1115
	D730,D731	DIODE	1SS252
	D734-D743	DIODE	1SS252
	D745	DIODE	1SS252
	D750	DIODE	1SS252
	D752-D757	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
	C401,C402	AUDIO FILM CAPACITOR	CFTXA153J50
	C403,C404	AUDIO FILM CAPACITOR	CFTXA823J50
	C405,C406	MYLOR FILM CAPACITOR	CQMA332J50
	C701	CERAMIC CAPACITOR	CKCYF103Z50
	C702	CEA(47000/5.5V)	ACH1037
	C703,C704	CERAMIC CAPACITOR	CKDYF223Z50
	C705	ELECTR. CAPACITOR	CEJA010M50
	C706	CERAMIC CAPACITOR	CKCYF103Z50
	C707	ELECTR. CAPACITOR	CEJA2R2M50
	C708	ELECTR. CAPACITOR	CEJA101M10
	C709	CERAMIC CAPACITOR	CKCYF473Z50
	C710,C711	CERAMIC CAPACITOR	CKDYF223Z50
	C716	ELECTR. CAPACITOR	CEJAR47M50
	C717	ELECTR. CAPACITOR	CEJA221M6

COILS & FILTERS

Mark.	No.	Description	Parts No.
	L701	AXIAL INDUCTOR	LAU220K

RESISTORS

Mark.	No.	Description	Parts No.
	VR401	VARIABLE	ACS1062
	VR402,VR403	VARIABLE(250K)	ACS1061
	OTHER RESISTORS		RD1/8PM□□□J

SWITCHS

Mark.	No.	Description	Parts No.
	S701-S715	SWITCH	ASG1029
	S717	SWITCH	ASG1029

OTHERS

Mark.	No.	Description	Parts No.
	X701	CERAMIC RESONATOR	ASS1018

AF ASS'Y (AWK1302)

SEMICONDUCTORS

Mark.	No.	Description	Parts No.
	IC101	OP AMP IC	CXA1297P
	IC201-IC205	E-SW IC	UPD6362C
	IC206	OP AMP IC	M5238PF
	IC208,IC209	OP AMP IC	M5238PF
	IC210	OP AMP IC	CXA1297P
	IC211	IC	UPC4570C
	IC212	OP AMP IC	M5238PF
	IC301	REGULATOR IC	NJM78M56FA
	IC302	REGULATOR IC	UPC7812H
	Q101-Q104	N-FET	2SK369
	Q105-Q108	TRANSISTOR	2SC1845
	Q109	TRANSISTOR	2SA992
	Q110	TRANSISTOR	2SC1845
	Q111	TRANSISTOR	DTC143ES
	Q112	TRANSISTOR	2SC2458
	Q113	TRANSISTOR	2SA992
	Q114	TRANSISTOR	2SC1845
	Q115	TRANSISTOR	DTC143ES
	Q116	TRANSISTOR	DTA143ES
	Q117	TRANSISTOR	2SA1048
	Q118	TRANSISTOR	2SC2458
	Q119	TRANSISTOR	DTC124ES
	Q120	TRANSISTOR	DTC143ES
	Q201,Q202	TRANSISTOR	2SC2878
	Q209	TRANSISTOR	DTA143ES
	Q213-Q215	TRANSISTOR	DTC143ES
	Q216	TRANSISTOR	DTA143ES
	Q221	TRANSISTOR	DTA143ES
	Q222	TRANSISTOR	2SA1048
	Q225	TRANSISTOR	DTC143ES
	Q226	TRANSISTOR	2SC2458
	Q227	TRANSISTOR	DTA143ES
	Q228	TRANSISTOR	2SC2458
	Q301	TRANSISTOR	2SC1845
	Q302	TRANSISTOR	2SA992
	Q303,Q304	TRANSISTOR	2SC2705
	Q305-Q307	TRANSISTOR	2SC3298
	Q308	TRANSISTOR	2SA1145
	Q309	TRANSISTOR	2SA1306
	Q310	TRANSISTOR	2SA1145
	Q311,Q312	TRANSISTOR	2SA1306
	D101,D102	DIODE	1SS252
	D103,D104	ZENER DIODE	RD12ESB1
	D105-D113	DIODE	1SS252
	D201-C203	DIODE	1SS252
	D208-D216	DIODE	1SS252
	D217,D218	ZENER DIODE	RD12ESB3
	D219-D223	DIODE	1SS252
	D224	ZENER DIODE	RD10ESB2
	D301-D308	DIODE	S5566
	D313-D316	DIODE	10DF2FD
	D317,D318	ZENER DIODE	RD27FB
	D319,D320	ZENER DIODE	RD18FB2
	D321,D322	DIODE	1SS252

CAPACITORS

Mark.	No.	Description	Parts No.
	C101,C102	PP CAPACITOR(0.01/50V)	ACE1018
	C103,C104	CERAMIC CAPACITOR	CCDSL181J50
	C105,C106	PP CAPACITOR(0.01/50V)	ACE1018
	C107,C108	ELECTR. CAPACITOR	CEXANP101M25
	C109,C110	PP CAPACITOR(0.051/50V)	ACE1049
	C111,C112	PP CAPACITOR(0.015/50V)	ACE1030
	C113,C114	ELECTR. CAPACITOR	CEXANP3R3M50
	C115	CERAMIC CAPACITOR	CKDYF103Z50
	C116,C117	CERAMIC CAPACITOR	CKDYB103K50
	C118	ELECTR. CAPACITOR	CEAS100M25
	C119	CERAMIC CAPACITOR	CKDYF103Z50
	C120	ELECTR. CAPACITOR	CEAS101M16
	C121,C122	CERAMIC CAPACITOR	CKDYF103Z50
	C123,C124	CERAMIC CAPACITOR	CCDSL121J50
	C125,C126	POLYESTER CAPACITOR	CQMXA472J100
	C127,C128	CERAMIC CAPACITOR	CCDCH330J50
	C129	ELECTR. CAPACITOR	CEANP010M50
	C201-C204	CERAMIC CAPACITOR	CCDSL181K500
	C205,C206	CERAMIC CAPACITOR	CCDSL271K500
	C207,C208	CERAMIC CAPACITOR	CCDSL181K500
	C209,C210	CERAMIC CAPACITOR	CCDSL101K500
	C211-C220	CERAMIC CAPACITOR	CCDSL181K500
	C221,C222	CERAMIC CAPACITOR	CCDSL271K500
	C223,C224	CERAMIC CAPACITOR	CCCSL680K500
	C225,C226	ELECTR. CAPACITOR	CEXA4R7M50
	C227,C228	ELECTR. CAPACITOR	CEAS100M25
	C229,C230	ELECTR. CAPACITOR	CEAS101M16
	C233,C234	ELECTR. CAPACITOR	CEXA4R7M50
	C235,C236	ELECTR. CAPACITOR	CEXA101M25
	C237,C238	ELECTR. CAPACITOR	CEAS010M50
	C239,C240	AUDIO FILM CAPACITOR	CFTXA823J50
	C241,C242	ELECTR. CAPACITOR	CEAS100M50
	C243,C244	ELECTR. CAPACITOR	CEAS101M16
	C245,C246	ELECTR. CAPACITOR	CEXA101M25
	C247,C248	ELECTR. CAPACITOR	CEYA470M25
	C249	ELECTR. CAPACITOR	CEAS101M16
	C250	ELECTR. CAPACITOR	CEAS010M50
	C251,C252	CERAMIC CAPACITOR	CKCYF103Z50
	C253	CERAMIC CAPACITOR	CKDYF103Z50
	C255,C256	CERAMIC CAPACITOR	CCDSL330J50
	C257,C258	CERAMIC CAPACITOR	CCDSL151J50
	C259-C262	CERAMIC CAPACITOR	CCDSL101J50
	C265,C266	CERAMIC CAPACITOR	CCCSL151J50
	C267,C268	CERAMIC CAPACITOR	CCCSL330J50
	C301	ELECTR. CAPACITOR	CEAS222M25
	C302	ELECTR. CAPACITOR	CEHAQ010M50
	C305	ELECTR. CAPACITOR	CEAS102M25
	C306	CERAMIC CAPACITOR	CKDYF103Z50
	C307-C310	ELECTR. CAPACITOR	CEYA102M50
	C311,C312	ELECTR. CAPACITOR	CEYA101M25

	Parts No.
	10DF2FD
	RD27FB
	RD18FB2
	1SS252
0V)	ACE1018
	CCDSL181J50
0V)	ACE1018
	CEXANP101M25
50V)	ACE1049
50V)	ACE1030
	CEXANP3R3M50
	CKDYF103Z50
	CKDYB103K50
	CEAS100M25
	CKDYF103Z50
	CEAS101M16
	CKDYF103Z50
	CCDSL121J50
OR	CQMXA472J100
	CCDCH330J50
	CEANP010M50
	CCDSL181K500
	CCDSL271K500
	CCDSL181K500
	CCDSL101K500
	CCDSL181K500
	CCDSL271K500
	CCCSL680K500
	CEXA4R7M50
	CEAS100M25
	CEAS101M16
	CEXA4R7M50
	CEXA101M25
	CEAS010M50
OR	CFTXA823J50
	CEAS100M50
	CEAS101M16
	CEXA101M25
	CEYA470M25
	CEAS101M16
	CEAS010M50
	CKCYF103Z50
	CKDYF103Z50
	CCDSL330J50
	CCDSL151J50
	CCDSL101J50
	CCCSL151J50
	CCCSL330J50
	CEAS222M25
	CEHAQ010M50
	CEAS102M25
	CKDYF103Z50
	CEYA102M50
	CEYA101M25

Mark.	No.	Description	Parts No.
	C313	ELECTR. CAPACITOR	CEHAQ010M50
	C314	ELECTR. CAPACITOR	CEAS221M16
	C315	ELECTR. CAPACITOR	CEHAQ010M50
	C316	ELECTR. CAPACITOR	CEAS221M16
	C317	ELECTR. CAPACITOR	CEAS100M50
	C318	ELECTR. CAPACITOR	CEAS220M50
	C319-C321	CKA(0.01/AC250V)	ACG1005
	C322,C324	CERAMIC CAPACITOR	CKCYF103Z50
	C323	CERAMIC CAPACITOR	CKCYF473Z50
COILS & FILTERS			
	L101,L102	COIL	ATH1010
RESISTORS			
	VR201	VARIABLE	ACW1008
	R103-R120	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R121,R122	CARBON FILM RESISTOR	RD1/4PM□□□J
	R123-R132	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R133,R134	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R153	CARBON FILM RESISTOR	RD1/4PM100J
	R155-R160	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R201,R202	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R203-R218	CARBON FILM RESISTOR	RD1/4PM□□□J
	R225,R226	CARBON FILM RESISTOR	RD1/4PM□□□J
	R231,R232	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R235,R236	CARBON FILM RESISTOR	RD1/4PM□□□J
	R237,R238	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R239,R240	CARBON FILM RESISTOR	RD1/4PM□□□J
	R241-R248	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R249,R250	CARBON FILM RESISTOR	RDR1/4PM101J
	R251-R254	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R267,R268	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R269	CARBON FILM RESISTOR	RD1/4PM102J
	R271-R280	CARBON FILM RESISTOR	RD1/4PM□□□J
	R294	CARBON FILM RESISTOR	RD1/4PM100J
	R301,R302	FUSIBLE RESISTOR	RFA1/4PS270J
	R303-R310	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R312	CARBON FILM RESISTOR	RD1/4PM100J
	OTHER RESISTORS		RD1/8PM□□□J
OTHERS			
	CN1-CN3	CONNECTOR(15P)	KPE15
	CN5	CONNECTOR(9P)	KPC9
	CN6	CONNECTOR(5P)	KPC5
	RY101-RY103	RELAY	ASR1018
	RY201-RY205	RELAY	ASR1018
		SCREW	ABA1027
		PIN JACK(4P)(LINE1·LINE2)	AKB1124
		PIN JACK(6P)(CD·TUNER·TAPE1/DAT)	AKB1129
		PIN JACK(2P)(LINE3·LINE4)	AKB1146
		PIN JACK(6P)(TAPE2 MONITOR)	AKB1148
		PIN JACK(2P)(OUTPUT, PHONO)	AKB1151

Mark.	No.	Description	Parts No.
	C313	ELECTR. CAPACITOR	CEHAQ010M50
	C314	ELECTR. CAPACITOR	CEAS221M16
	C315	ELECTR. CAPACITOR	CEHAQ010M50
	C316	ELECTR. CAPACITOR	CEAS221M16
	C317	ELECTR. CAPACITOR	CEAS100M50
	C318	ELECTR. CAPACITOR	CEAS220M50
	C319-C321	CKA(0.01/AC250V)	ACG1005
	C322,C324	CERAMIC CAPACITOR	CKCYF103Z50
	C323	CERAMIC CAPACITOR	CKCYF473Z50

COILS & FILTERS

Mark.	No.	Description	Parts No.
	L101,L102	COIL	ATH1010

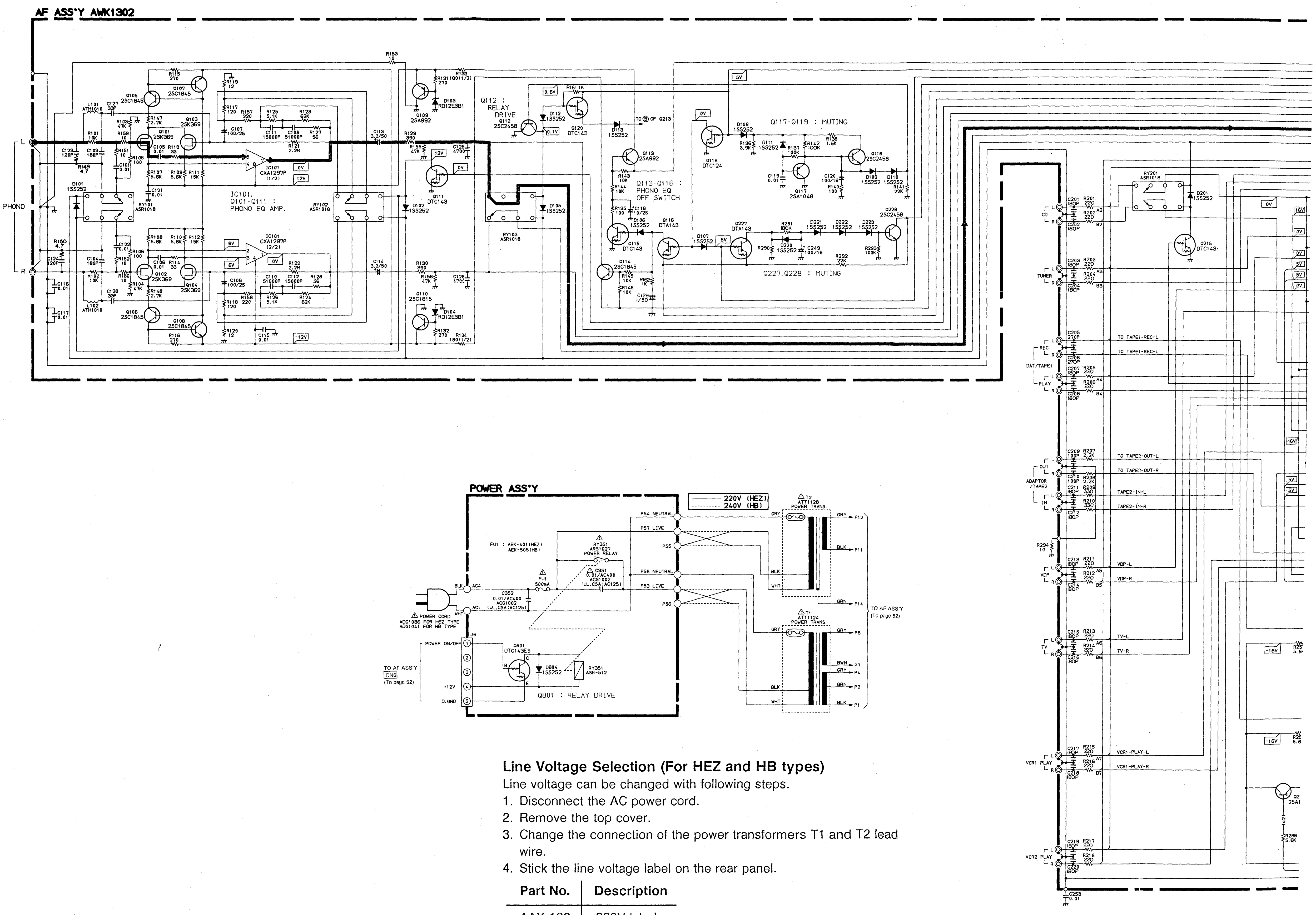
RESISTORS

Mark.	No.	Description	Parts No.
	VR201	VARIABLE	ACW1008
	R103-R120	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R121,R122	CARBON FILM RESISTOR	RD1/4PM□□□J
	R123-R132	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R133,R134	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R153	CARBON FILM RESISTOR	RD1/4PM100J
	R155-R160	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R201,R202	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R203-R218	CARBON FILM RESISTOR	RD1/4PM□□□J
	R225,R226	CARBON FILM RESISTOR	RD1/4PM□□□J
	R231,R232	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R235,R236	CARBON FILM RESISTOR	RD1/4PM□□□J
	R237,R238	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R239,R240	CARBON FILM RESISTOR	RD1/4PM□□□J
	R241-R248	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R249,R250	CARBON FILM RESISTOR	RDR1/4PM101J
	R251-R254	CARBON FILM RESISTOR	RDR1/4PM□□□J
	R267,R268	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R269	CARBON FILM RESISTOR	RD1/4PM102J
	R271-R280	CARBON FILM RESISTOR	RD1/4PM□□□J
	R294	CARBON FILM RESISTOR	RD1/4PM100J
	R301,R302	FUSIBLE RESISTOR	RFA1/4PS270J
	R303-R310	CARBON FILM RESISTOR	RDR1/2PM□□□J
	R312	CARBON FILM RESISTOR	RD1/4PM100J
	OTHER RESISTORS		RD1/8PM□□□J

OTHERS

Mark.	No.	Description	Parts No.
	CN1-CN3	CONNECTOR(15P)	KPE15
	CN5	CONNECTOR(9P)	KPC9
	CN6	CONNECTOR(5P)	KPC5
	RY101-RY103	RELAY	ASR1018
	RY201-RY205	RELAY	ASR1018
		SCREW	ABA1027
		PIN JACK(4P)(LINE1·LINE2)	AKB1124
		PIN JACK(6P)(CD·TUNER·TAPE1/DAT)	AKB1129
		PIN JACK(2P)(LINE3·LINE4)	AKB1146
		PIN JACK(6P)(TAPE2 MONITOR)	AKB1148
		PIN JACK(2P)(OUTPUT, PHONO)	AKB1151

SCHEMATIC DIAGRAM AND P.C. BOARDS CONNECTION DIAGRAM

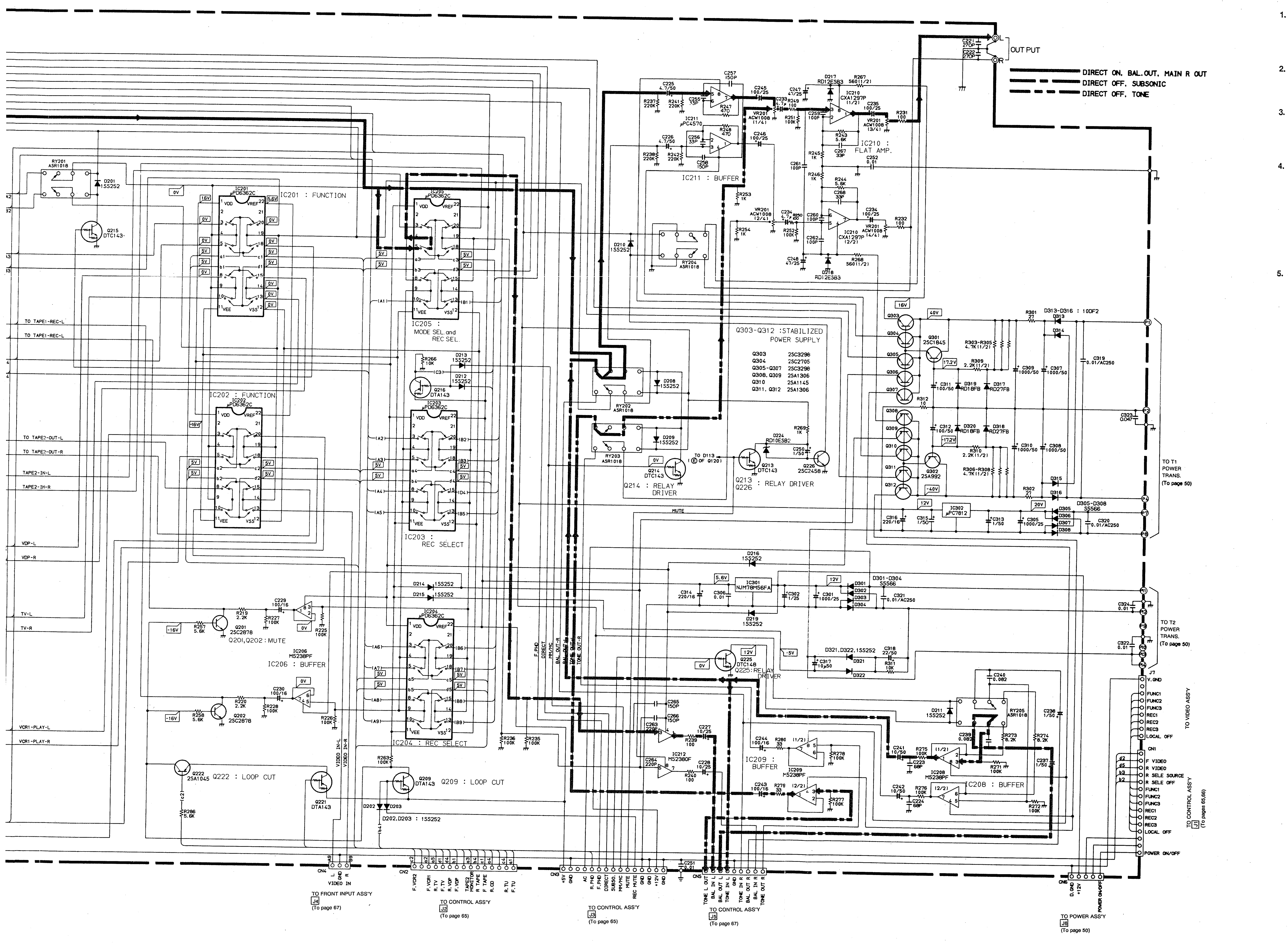

AF ASS'Y AWK1302
PHONO
IC101, Q101-Q111 : PHONO EQ AMP.
IC101 CXA1297P (1/2)
IC101 CXA1297P (2/2)
RY101 ASR1018
RY102 ASR1018
RY103 ASR1018
Q112 : RELAY DRIVE
Q112 2SC2458
Q113-Q116 : PHONO EQ OFF SWITCH
Q117-Q119 : MUTING
Q227,Q228 : MUTING
RY201 ASR1018
Q215 DTC143
CD
TUNER
DAT/TAPE1
ADAPTOR /TAPE2
VDP
TV
VCR1 PLAY
VCR2 PLAY
TO TAPE1-REC-L
TO TAPE1-REC-R
TO TAPE2-OUT-L
TO TAPE2-OUT-R
TAPE2-IN-L
TAPE2-IN-R
VDP-L
VDP-R
TV-L
TV-R
VCR1-PLAY-L
VCR1-PLAY-R
POWER ASS'Y
220V (HEZ)
240V (HB)
FU1 : AEK-401(HEZ) AEK-505(HB)
RY351 ASR1027 POWER RELAY
C351 0.01/AC400 ACG1002 (UL,CSA:AC125)
C352 0.01/AC400 ACG1002 (UL,CSA:AC125)
T2 ATT1128 POWER TRANS.
T1 ATT1124 POWER TRANS.
POWER CORD ADG1036 FOR HEZ TYPE ADG1041 FOR HB TYPE
TO AF ASS'Y CN6 (To page 52)
POWER ON/OFF
+12V
D.GND
Q801 DTC143ES
D804 1SS252
RY351 ASR-512
Q801 : RELAY DRIVE
TO AF ASS'Y (To page 52)

Line Voltage Selection (For HEZ and HB types)

Line voltage can be changed with following steps.

1. Disconnect the AC power cord.
2. Remove the top cover.
3. Change the connection of the power transformers T1 and T2 lead wire.
4. Stick the line voltage label on the rear panel.

Part No.	Description
AAX-193	220V label
AAX-192	240V label


7
8
9
10
11
12
A
B
C
D
OUT PUT
DIRECT ON, BAL.OUT, MAIN R OUT
DIRECT OFF, SUBSONIC
DIRECT OFF, TONE
IC201 : FUNCTION
IC202 : FUNCTION
IC205 : MODE SEL and REC SEL.
IC203 : REC SELECT
IC204 : REC SELECT
IC211 : BUFFER
IC210 : FLAT AMP.
Q303-Q312 :STABILIZED POWER SUPPLY
Q214 : RELAY DRIVER
Q213 Q226 : RELAY DRIVER
Q225:RELAY DRIVER
Q201,Q202 : MUTE
IC206 : BUFFER
IC209 : BUFFER
IC208 : BUFFER
Q222 : LOOP CUT
Q209 : LOOP CUT
D202,D203 : 1SS252
D313-D316 : 10DF2
D301-D304 S5566
D305-D308 S5566
D321,D322,1SS252
TO TAPE1-REC-L
TO TAPE1-REC-R
TO TAPE2-OUT-L
TO TAPE2-OUT-R
TAPE2-IN-L
TAPE2-IN-R
VDP-L
VDP-R
TV-L
TV-R
VCR1-PLAY-L
VCR1-PLAY-R
MUTE
TO T1 POWER TRANS. (To page 50)
TO T2 POWER TRANS. (To page 50)
TO VIDEO ASS'Y
TO CONTROL ASS'Y J2 (To pages 65,66)
TO FRONT INPUT ASS'Y J4 (To page 67)
TO CONTROL ASS'Y J2 (To page 65)
TO CONTROL ASS'Y J3 (To page 65)
TO CONTROL ASS'Y J5 (To page 67)
TO POWER ASS'Y J8 (To page 50)
CN4
CN2
CN3
CN5
CN6
CN1
J7

1. **RESISTORS:**

Indicated in Ω, 1/8, 1/4W, ±5% tolerance unless otherwise noted K; kΩ, M; MΩ, (F); ±1%, (G); ±2%, (K); ±10%, (M); ±20% tolerance.

2. **CAPACITORS:**

Indicated in capacity (μF) / voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.

3. **VOLTAGE CURRENT:**

▭ ; DC voltage (V) at no input signal.
Value in ( ) is DC voltage at rated power.
⇦mA ; DC current at no input signal.

4. **OTHERS**

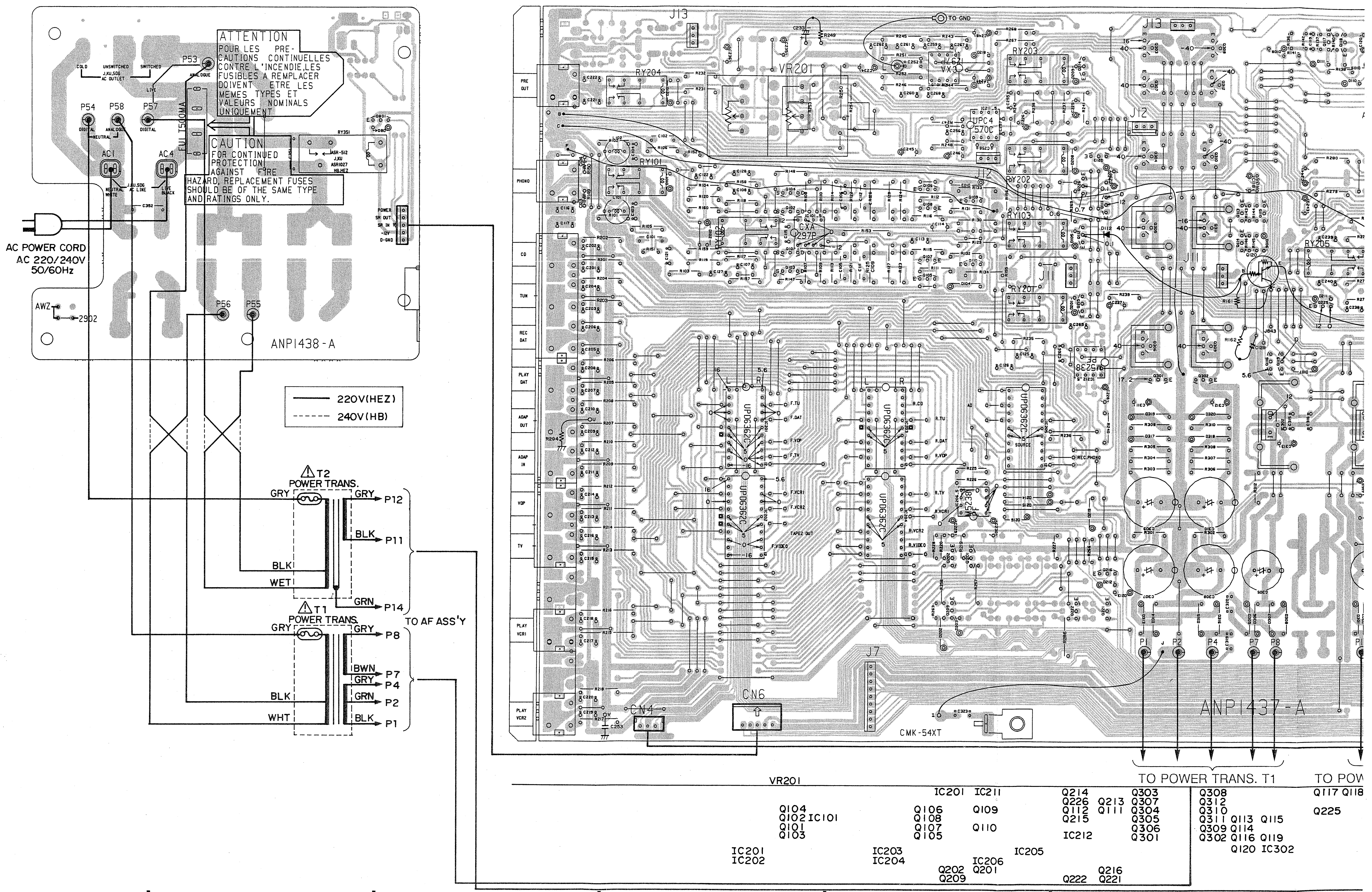
- ←; Signal route.
- ⊘ ; Adjusting point.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- ※ marked capacitor and resistor have parts number.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. **SWITCHES (The underline indicates the switch position)**

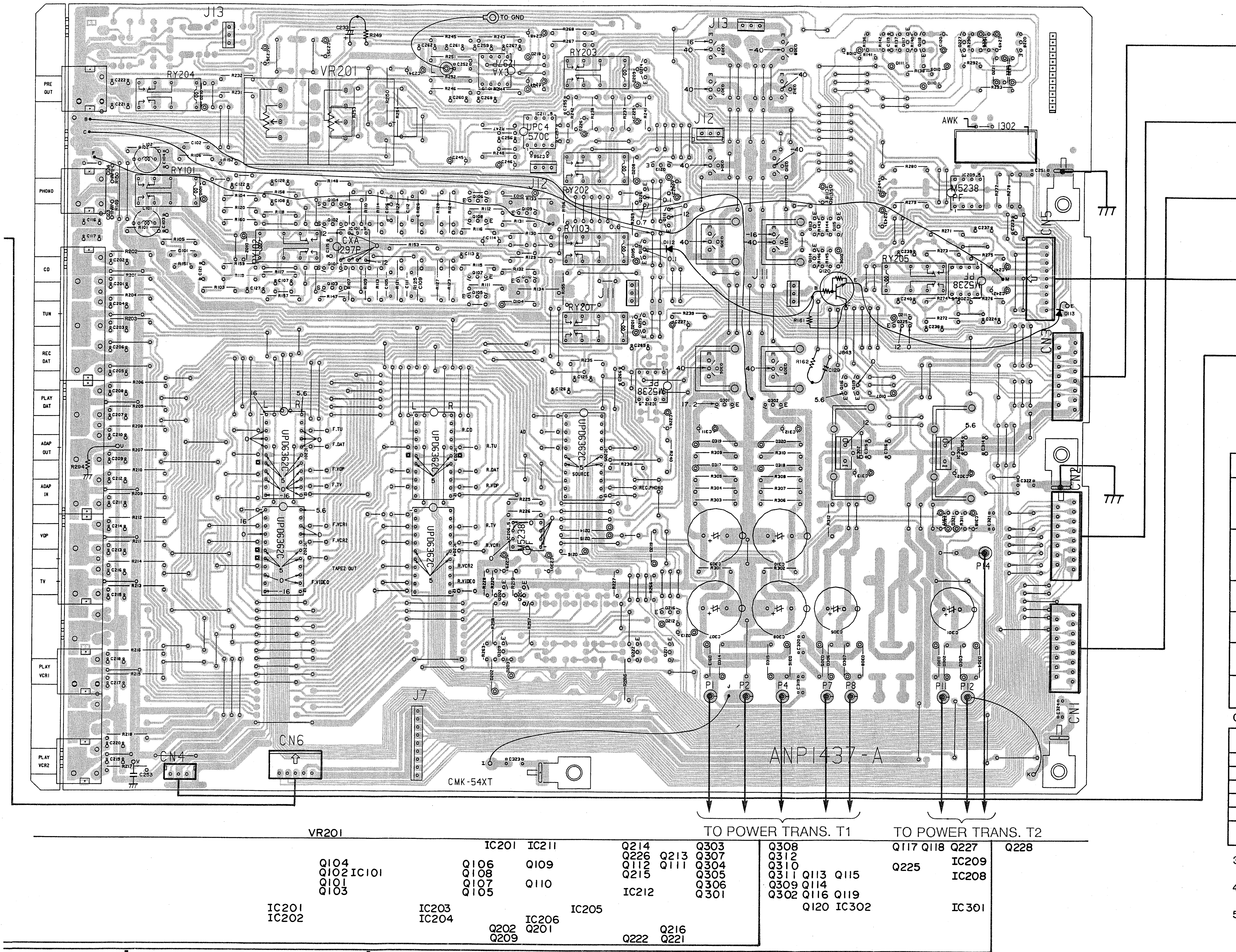
CONTROL Assembly
S701 : POWER SW (STANDBY-ON)
S702 : LINE1
S703 : LINE2
S704 : LINE3
S705 : LINE4
S706 : LINE5
S707 : PHONO
S708 : TAPE 2/MONITOR
S709 : CD
S710 : TUNER
S711 : TAPE 1/DAT
S712 : MUTING
S713 : SUBSONIC
S714 : CPHONO-SEL
S715 : DIRECT
S717 : REC-SEL

POWER ASS'Y

AF ASS'Y (AWK1302)


1
2
3
4
5
6
A
B
C
D
ATTENTION
POUR LES PRECAUTIONS CONTINUELLES CONTRE L'INCENDIE,LES FUSIBLES A REMPLACER DOIVENT ETRE LES MEMES TYPES ET VALEURS NOMINALS UNIQUEMENT
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
P53
P54
P58
P57
P56
P55
AC1
AC4
COLD
UNSWITCHED
SWITCHED
J,XU,SDG AC OUTLET
ANALOGUE
DIGITAL
LIVE
NEUTRAL
WHITE
BLACK
J,XU,SDG AC LINE
FU1 T500MA
RY351
ASR-512 J,XU
ASR1027 HB,HEZ
POWER
SR OUT
SR IN
+12V
D-GND
AC POWER CORD
AC 220/240V
50/60Hz
AWZ
2902
ANP1438-A
220V(HEZ)
240V(HB)
T2
POWER TRANS.
T1
POWER TRANS.
GRY
BLK
WHT
GRN
BWN
P12
P11
P14
P8
P7
P4
P2
P1
TO AF ASS'Y
J13
J12
J11
J7
CN4
CN6
CMK-54XT
TO GND
VR201
RY101
RY102
RY103
RY201
RY202
RY203
RY204
RY205
UPC4570C
CXA1297P
UPD6362C
M5238
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
PLAY VCR1
PLAY VCR2
ANP1437-A
TO POWER TRANS. T1
TO POW
VR201
Q104
Q102
Q101
Q103
IC101
IC201
IC202
IC203
IC204
IC201
IC211
Q106
Q108
Q107
Q105
Q109
Q110
Q202
Q209
IC206
Q201
IC205
Q214
Q226
Q112
Q215
Q213
Q111
IC212
Q222
Q216
Q221
Q303
Q307
Q304
Q305
Q306
Q301
Q308
Q312
Q310
Q311
Q309
Q302
Q113
Q114
Q116
Q120
Q115
Q119
IC302
Q117
Q118
Q225

AF ASS'Y (AWK1302)


J13
VR201
RY204
RY203
RY202
RY103
RY101
RY102
RY201
RY205
TO GND
UPC4570C
CXA1297B
UPD6362C
M5238
AWK 1302
J11
J12
J7
J843
CN1
CN2
CN3
CN4
CN5
CN6
CMK-54XT
ANP1437-A
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
PLAY VCR1
PLAY VCR2
P1
P2
P4
P7
P8
P11
P12
P14
TO POWER TRANS. T1
TO POWER TRANS. T2
TO CONTROL ASS'Y J3 (To page 63)
TO CONTROL ASS'Y J2 (To page 63)
TO CONTROL ASS'Y J1 (To page 63)
TO CONTROL ASS'Y J5 (To page 63)
TO FRONT INPUT ASS'Y J4 (To page 62)
VR201
IC201 IC211
Q214 Q226 Q112 Q215
Q213 Q111
Q303 Q307 Q304 Q305 Q306 Q301
Q308 Q312 Q310 Q311 Q309 Q302
Q113 Q115 Q114 Q116 Q119 Q120 IC302
Q117 Q118 Q227 Q228
Q225
IC209 IC208
IC301
Q104 Q102 IC101 Q101 Q103
Q106 Q108 Q107 Q105
Q109 Q110
IC212
IC201 IC202
IC203 IC204
IC206 Q201
IC205
Q202 Q209
Q216 Q221
Q222

1. This P.C.B connection diagram is seen from the parts mount side.
2. The parts mounted on to the P.C.B can be replaced with those shown in the following correspondence table with wiring marks.

Indication of the P.C.B. pattern	Symbol of corresponding parts	Parts name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Condenser (Polar type)
C518		Condenser (Non-polar type)

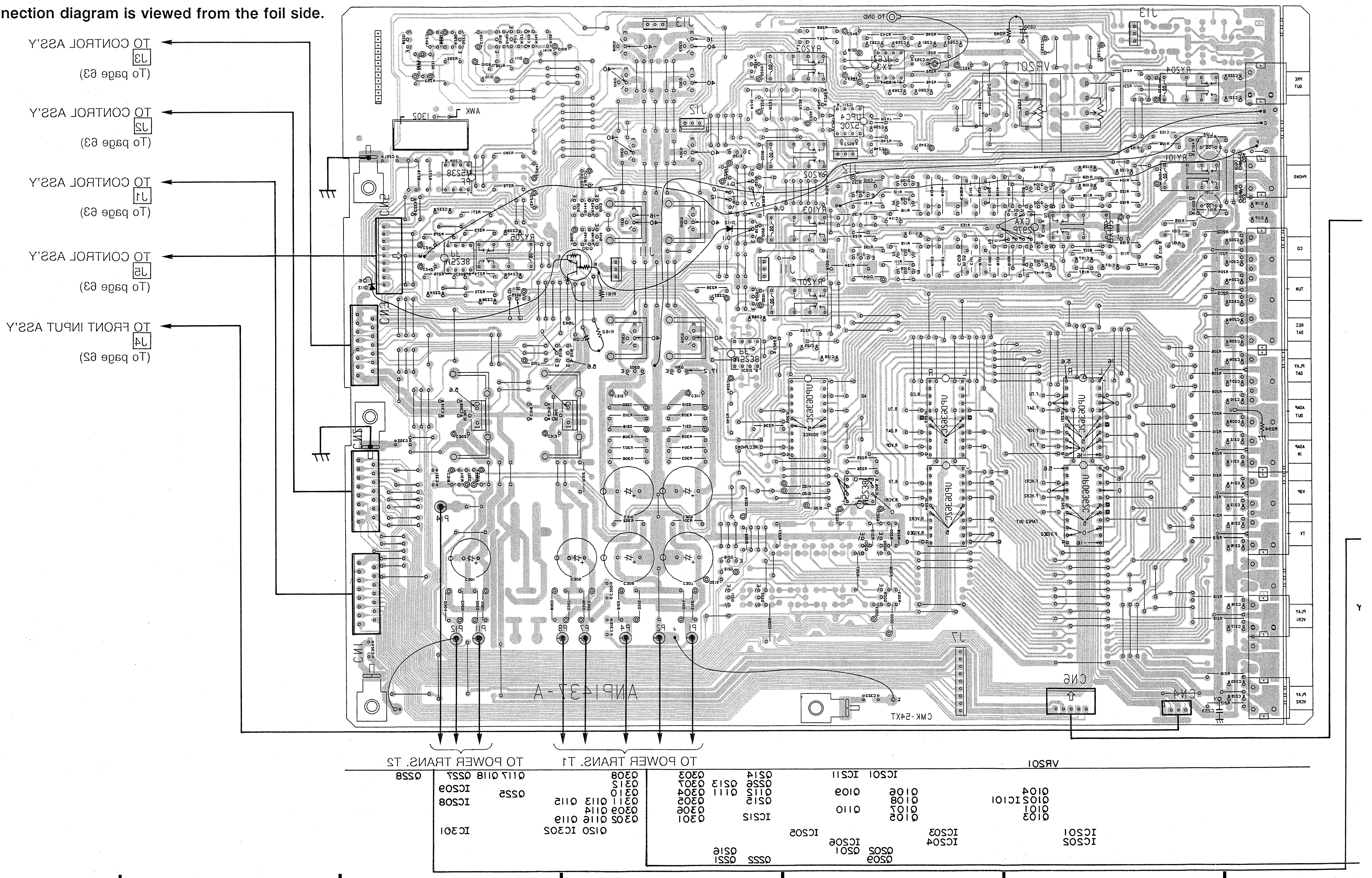
Others

Wiring mark on the P.C.B pattern diagram	Parts list
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or semi-fixed resistor

3. The condenser terminal marked with double circles (◎) represents (–) terminal.
4. The diode terminal marked with double circles (◎) represents the cathode side.
5. The transistor terminal marked with "E" represents an emitter.

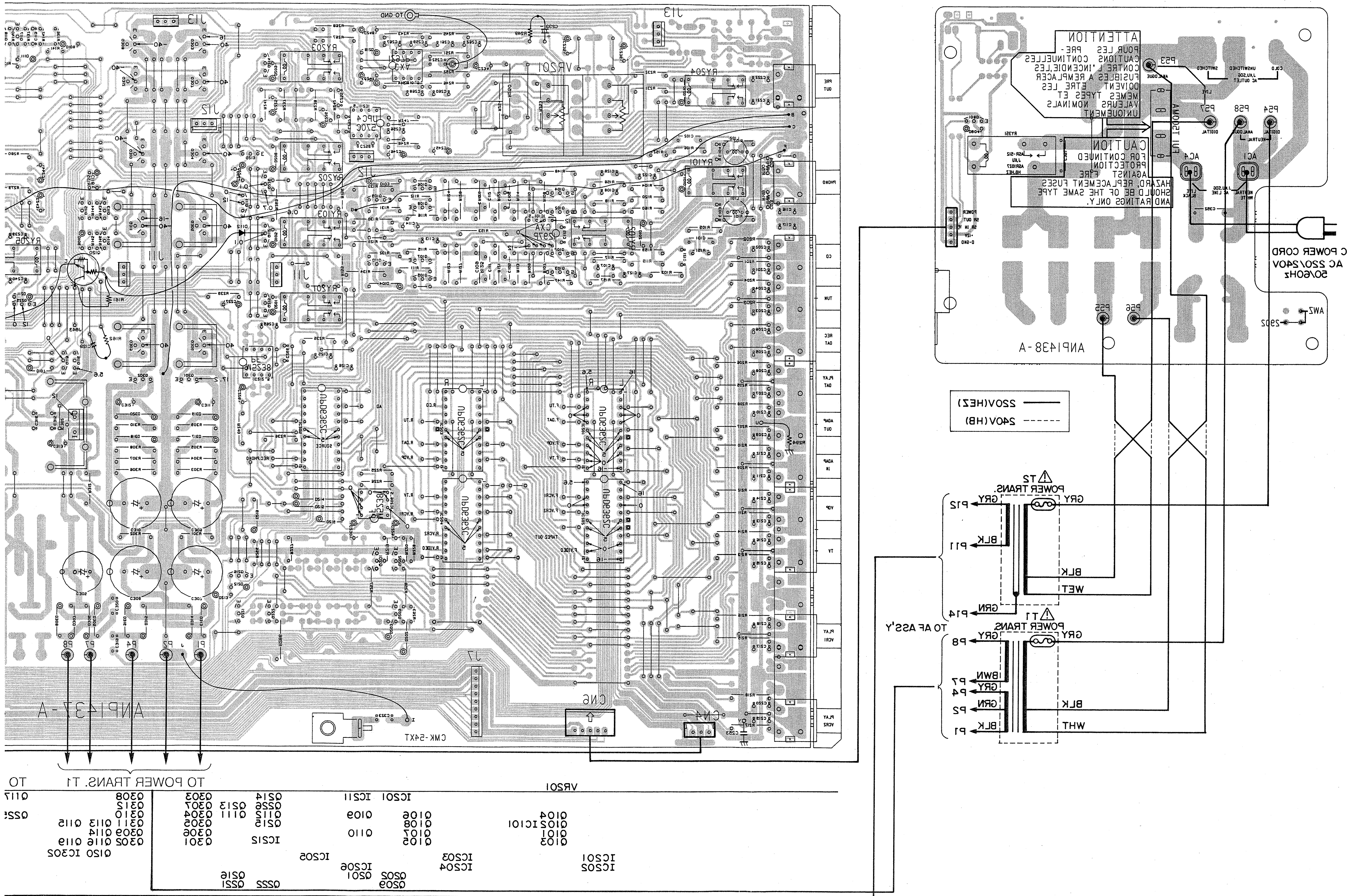
AF ASS'Y (AWK1302)

his P.C.B. connection diagram is viewed from the foil side.


9
8
7
6
5
4
3
TO CONTROL ASS'Y
J3
(To page 63)
TO CONTROL ASS'Y
J2
(To page 63)
TO CONTROL ASS'Y
J1
(To page 63)
TO CONTROL ASS'Y
J5
(To page 63)
TO FRONT INPUT ASS'Y
J4
(To page 62)
TO POWER TRANS. T2
TO POWER TRANS. T1
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
PLAY VCR1
PLAY VCR2
CN1
CN2
CN3
CN4
CN5
CN6
J11
J12
J13
J17
RY101
RY103
RY107
RY201
RY203
RY204
RY205
VR201
ANP1437-A
AWK1302
CMK-54XT
TO GND
Q228
Q117 Q118 Q227
IC209
Q225
IC208
IC301
Q308 Q312 Q310 Q311 Q113 Q115
Q309 Q114 Q302 Q116 Q119
Q120 IC302
Q303 Q307 Q304 Q305 Q306 Q301
Q214 Q226 Q213 Q112 Q111 Q215
IC212
IC201 IC211
Q109 Q110
Q106 Q108 Q107 Q105
IC205
IC206 Q201
Q216 Q221 Q222 Q202 Q209
IC203 IC204
VR201
Q104 Q102 IC101 Q101 Q103
IC201 IC202

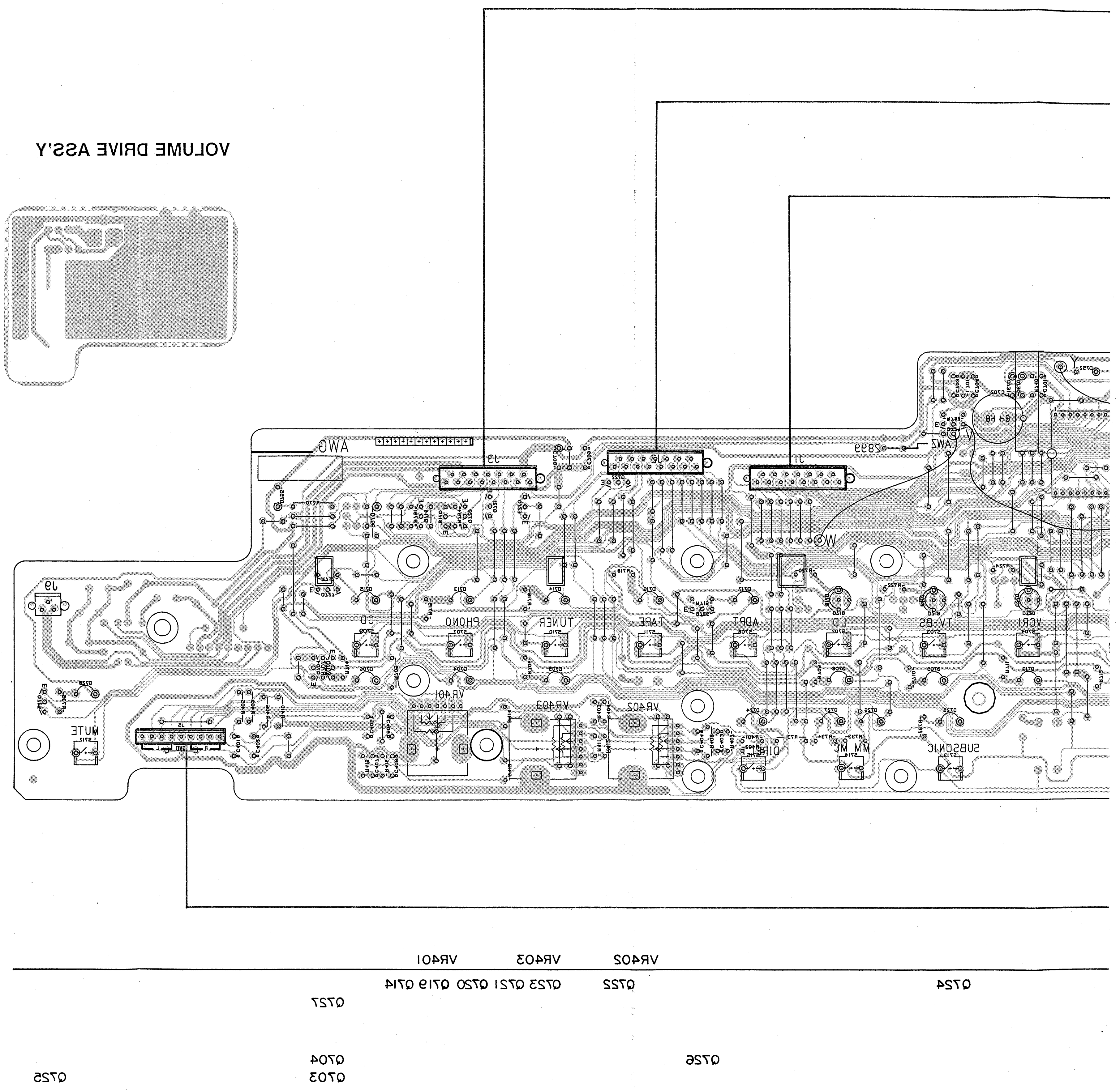
AF ASS'Y (AWK1302)

POWER ASS'Y


ATTENTION
POUR LES PRECAUTIONS CONTINUELLES CONTRE L'INCENDIE,LES FUSIBLES A REMPLACER DOIVENT ETRE LES MEMES TYPES ET VALEURS NOMINALS UNIQUEMENT
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
FU1 1500mA
P53
P57
P58
P54
AC4
AC1
P55
P56
AW2
S902
RY951
ANP1438-A
AC POWER CORD
AC 220V/240V
50/60Hz
220V(HEZ)
240V(HB)
T2 POWER TRANS.
GRY
BLK
WHT
GRN
P12
P11
P14
T1 POWER TRANS.
P8
BWN
P7
P4
P2
P1
TO AF ASS'Y
PRE OUT
PHONO
CD
TUN
REC DAT
PLAY DAT
ADAP OUT
ADAP IN
VDP
TV
PLAY VCR1
PLAY VCR2
VR201
RY101
RY103
RY104
RY107
RY201
RY202
RY203
RY204
RY205
J11
J12
J13
CN4
CN6
J7
CMK-54XT
ANP1437-A
TO POWER TRANS. T1
TO
μPD6325C
TO GND
A
B
C
D
1
2
3
4
5
6

This P.C.B. connection diagram is viewed from the foil side.

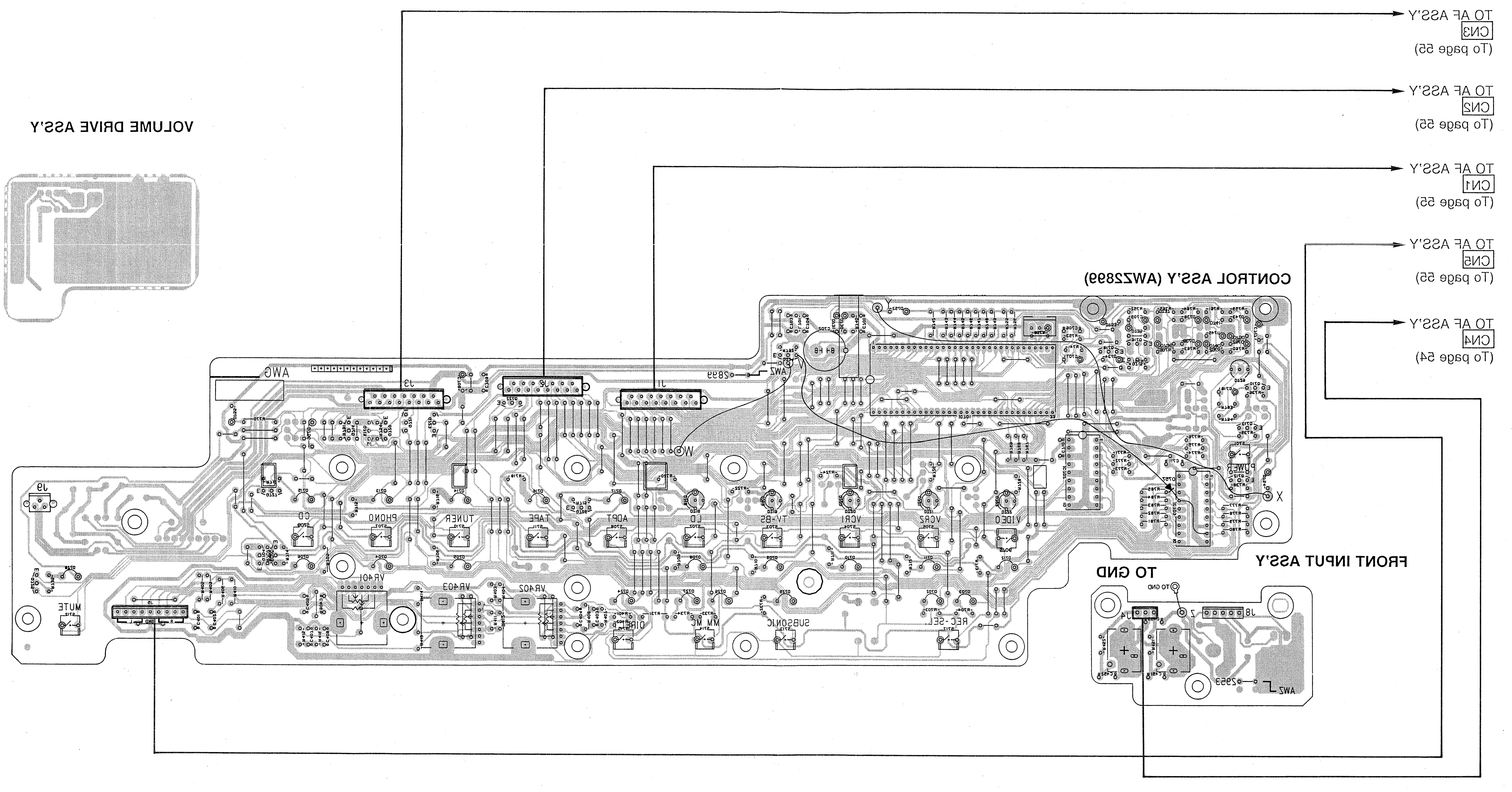
A


VOLUME DRIVE ASS'Y
AWG
J3
J2
J1
AWZ
2899
W
Y
J9
CD
PHONO
TUNER
TAPE
ADPT
LD
TV-BS
VCR1
MUTE
VR401
VR403
VR402
DIRECT
MM MC
SUBSONIC
VR401 VR403 VR402
Q723 Q721 Q720 Q719 Q714
Q722
Q724
Q727
Q704
Q703
Q726
Q725

B

C

D


VOLUME DRIVE ASS'Y
CONTROL ASS'Y (AWZ2899)
FRONT INPUT ASS'Y
TO AF ASS'Y
CN3
(To page 55)
TO AF ASS'Y
CN2
(To page 55)
TO AF ASS'Y
CN1
(To page 55)
TO AF ASS'Y
CN5
(To page 55)
TO AF ASS'Y
CN4
(To page 54)
TO GND
J1
J2
J3
J4
J8
J9
AWG
AWZ
Z899
Z953
V
W
X
Y
Z
PHONO
CD
TUNER
TAPE
ADPT
LD
TV-BS
VCR1
VCR2
VIDEO
POWER
MUTE
VR401
VR402
VR403
DIRECT
MM MC
SUBSONIC
REC-SEL
1
2
3
4
5
6
7
A
B
C
D

VR402 VR403 VR401

Q722 Q723 Q721 Q720 Q719 Q714

Q727

Q704
Q703

Q725

Q726

Q724

IC701

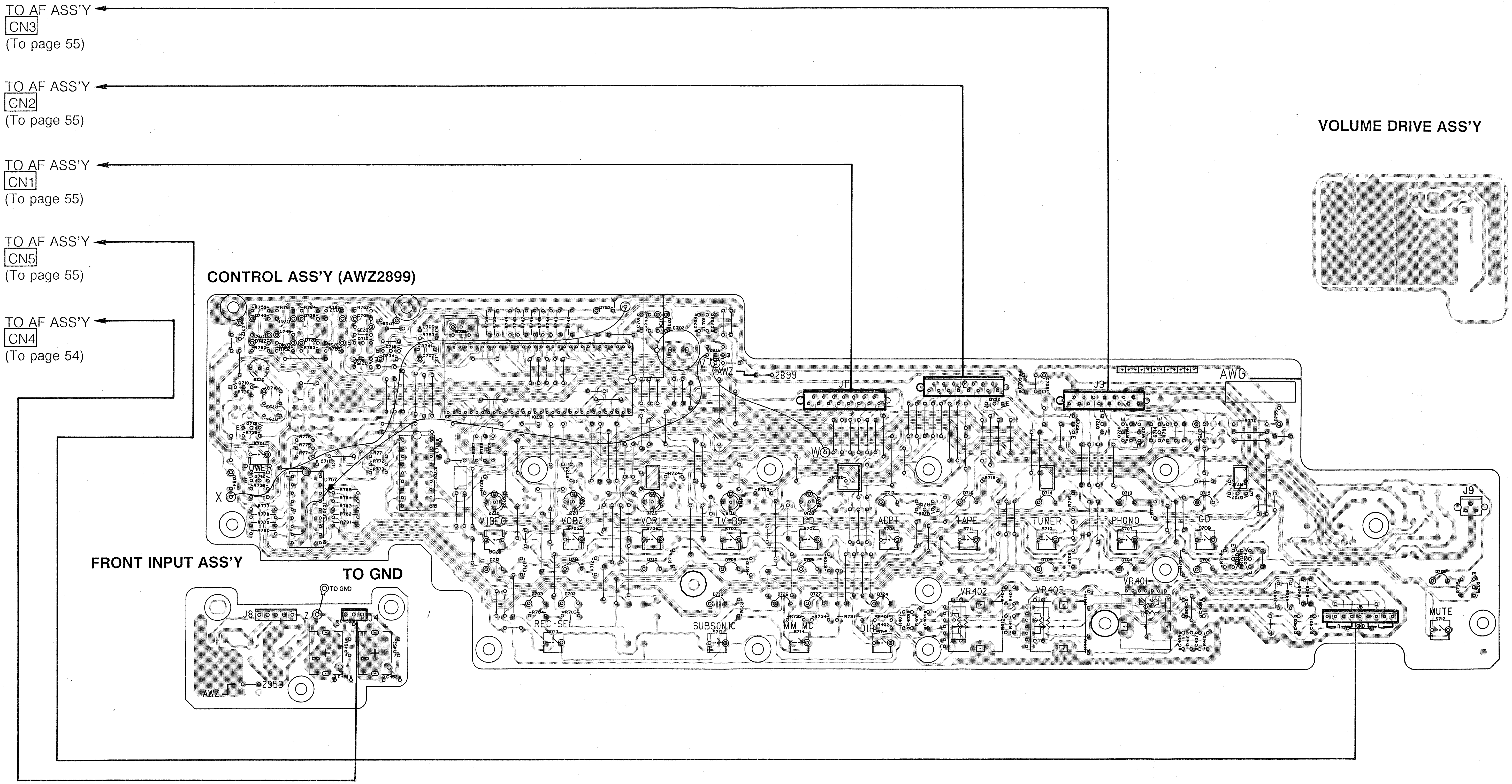
Q716 Q718
Q715

IC702

Q710

Q713
Q712

IC703


TO AF ASS'Y CN3 (To page 55)

TO AF ASS'Y CN2 (To page 55)

TO AF ASS'Y CN1 (To page 55)

TO AF ASS'Y CN5 (To page 55)

TO AF ASS'Y CN4 (To page 54)

CONTROL ASS'Y (AWZ2899)

FRONT INPUT ASS'Y

TO GND

VOLUME DRIVE ASS'Y

J1
J2
J3
AWG
AWZ 2899
POWER
VIDEO
VCR2
VCR1
TV-BS
LD
ADPT
TAPE
TUNER
PHONO
CD
J9
REC-SEL.
SUBSONIC
MM MC
DIRECT
VR402
VR403
VR401
J5
MUTE
J8
J4
TO GND
AWZ 2953
X
Y
V
W
Z

VR402 VR403 VR401

Q710 Q716 Q718 Q724 Q722 Q723 Q721 Q720 Q719 Q714

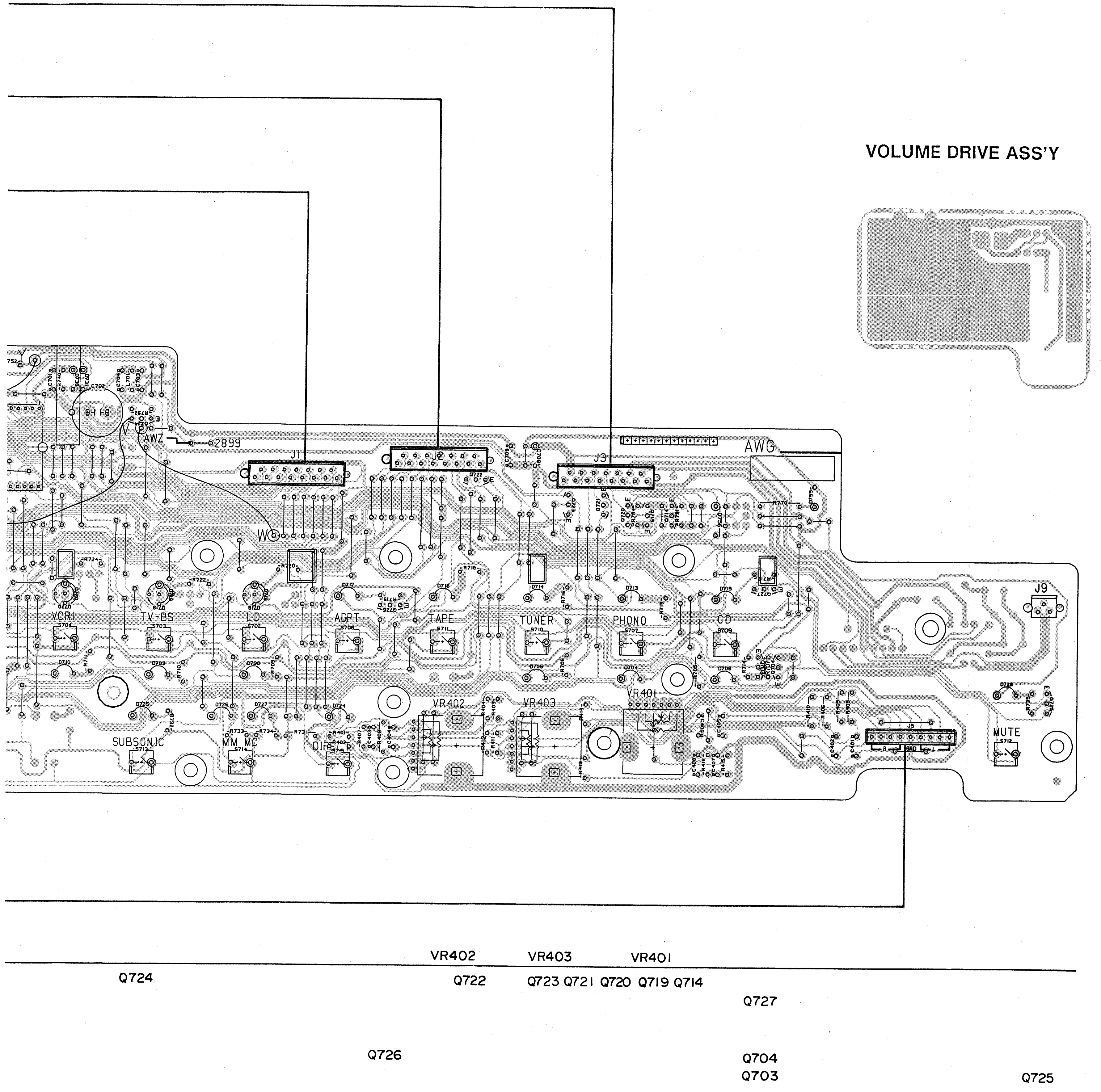
Q715 Q727

Q713 IC701

Q712

IC703 IC702 Q726 Q704

Q703 Q725


Y
V
AWZ
2899
J1
J2
J3
AWG
W
VCR1
TV-BS
LD
ADPT
TAPE
TUNER
PHONO
CD
J9
VR402
VR403
VR401
J5
MUTE
SUBSONIC
MM MC
DIRECT
VR402
VR403
VR401
Q724
Q722
Q723 Q721 Q720 Q719 Q714
Q727
Q726
Q704
Q703
Q725

VOLUME DRIVE ASS'Y

1. This P.C.B connection diagram is seen from the parts mount side.
2. The parts mounted on to the P.C.B can be replaced with those shown in the following correspondence table with wiring marks.

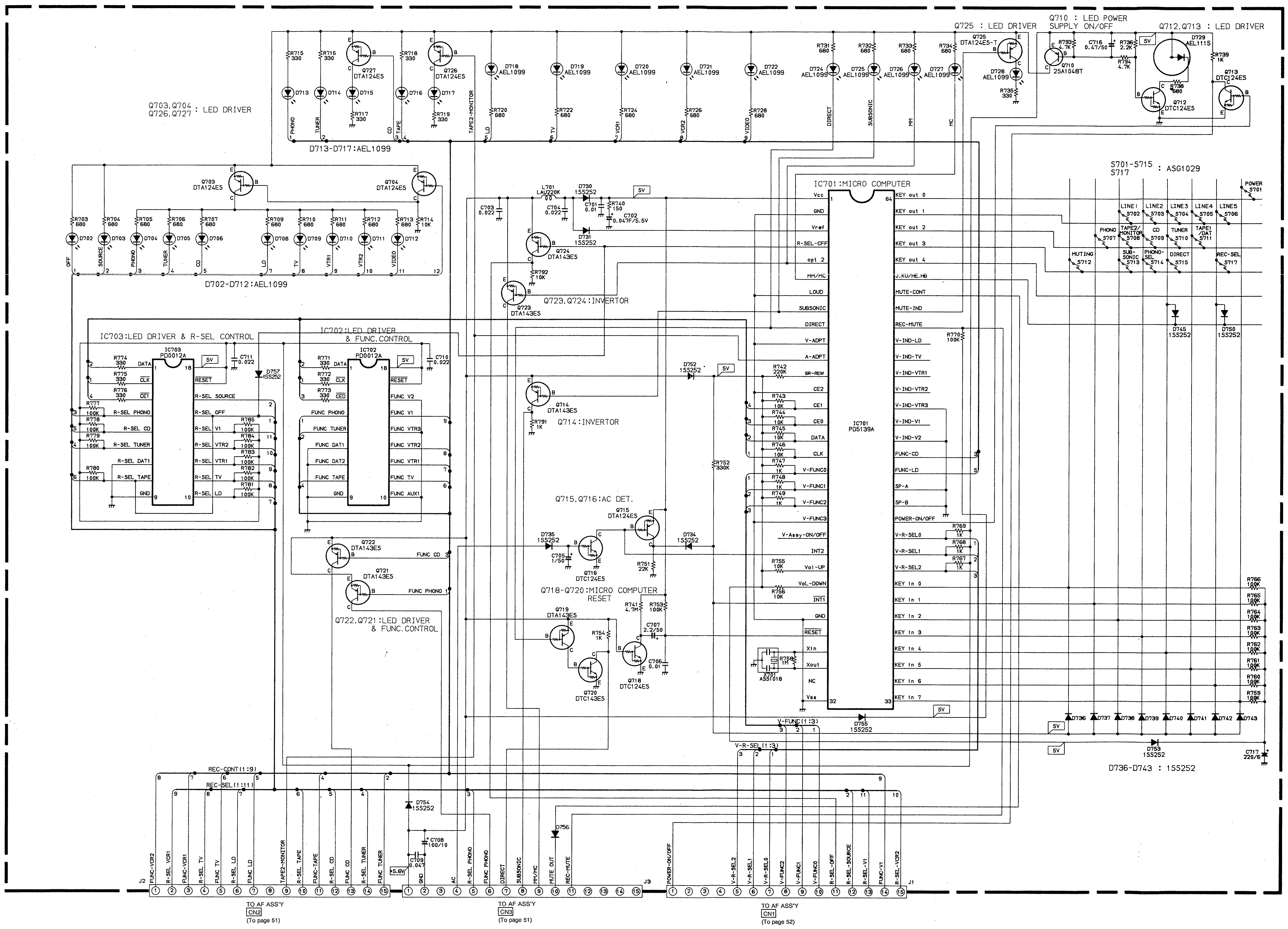
Indication of the P.C.B. pattern	Symbol of corresponding parts	Parts name
Q504 E	or E E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Condenser (Polar type)
C518		Condenser (Non-polar type)

Others

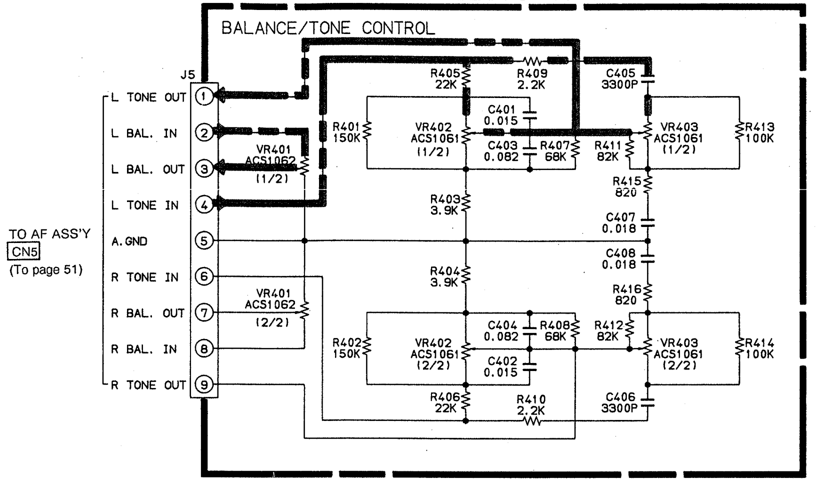
Wiring mark on the P.C.B pattern diagram	Parts list
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or semi-fixed resistor

3. The condenser terminal marked with double circles (◎) represents (–) terminal.
4. The diode terminal marked with double circles (◎) represents the cathode side.
5. The transistor terminal marked with "E" represents an emitter.

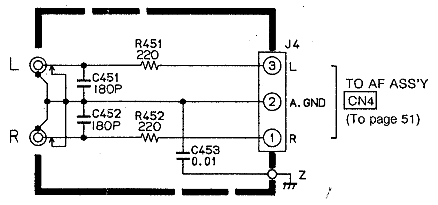
CONTROL ASS'Y AWZ2899 (2/2)


Q703,Q704
Q726,Q727 : LED DRIVER
D713-D717:AEL1099
D702-D712:AEL1099
Q725 : LED DRIVER
Q710 : LED POWER SUPPLY ON/OFF
Q712,Q713 : LED DRIVER
S701-S715
S717 : ASG1029
IC701:MICRO COMPUTER
IC701 PD5139A
IC703:LED DRIVER & R-SEL CONTROL
IC703 PD0012A
IC702:LED DRIVER & FUNC.CONTROL
IC702 PD0012A
Q723,Q724:INVERTOR
Q714:INVERTOR
Q715,Q716:AC DET.
Q718-Q720:MICRO COMPUTER RESET
Q722,Q721:LED DRIVER & FUNC.CONTROL
D736-D743 : 1SS252
X701 ASS1018
L701 LAU220K
REC-CONT(1:9)
REC-SEL(1:11)
V-FUNC(1:3)
V-R-SEL(1:3)
5V
+5.6V
J2
J3
J1
TO AF ASS'Y CN2 (To page 51)
TO AF ASS'Y CN3 (To page 51)
TO AF ASS'Y CN1 (To page 52)
FUNC-VCR2
R-SEL VCR1
FUNC-VCR1
R-SEL TV
FUNC TV
R-SEL LD
FUNC LD
TAPE2-MONITOR
R-SEL TAPE
FUNC-TAPE
R-SEL CD
FUNC CD
R-SEL TUNER
FUNC TUNER
GND
AC
R-SEL PHONO
FUNC PHONO
DIRECT
SUBSONIC
MM/MC
MUTE OUT
REC-MUTE
POWER-ON/OFF
V-R-SEL2
V-R-SEL1
V-R-SEL0
V-FUNC2
V-FUNC1
V-FUNC0
R-SEL-OFF
R-SEL-SOURCE
R-SEL-V1
FUNC-V1
R-SEL-VCR2
POWER S701
LINE1 S702
LINE2 S703
LINE3 S704
LINE4 S705
LINE5 S706
PHONO S707
TAPE2/MONITOR S708
CD S709
TUNER S710
TAPE1/DAT S711
MUTING S712
SUB-SONIC S713
PHONO-SEL S714
DIRECT S715
REC-SEL S717

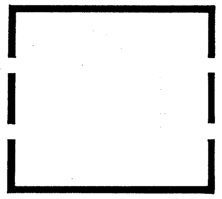
CONTROL ASS'Y AWZ2899 (1/2)


BALANCE/TONE CONTROL
J5
L TONE OUT ①
L BAL. IN ②
L BAL. OUT ③
L TONE IN ④
A.GND ⑤
R TONE IN ⑥
R BAL. OUT ⑦
R BAL. IN ⑧
R TONE OUT ⑨
TO AF ASS'Y
CN5
(To page 51)
VR401 ACS1062 (1/2)
VR401 ACS1062 (2/2)
R401 150K
R402 150K
VR402 ACS1061 (1/2)
VR402 ACS1061 (2/2)
R405 22K
R406 22K
R409 2.2K
R410 2.2K
C401 0.015
C402 0.015
C403 0.082
C404 0.082
R407 68K
R408 68K
R403 3.9K
R404 3.9K
C405 3300P
C406 3300P
R411 82K
R412 82K
VR403 ACS1061 (1/2)
VR403 ACS1061 (2/2)
R413 100K
R414 100K
R415 820
R416 820
C407 0.018
C408 0.018

FRONT INPUT ASS'Y


L
R
R451 220
R452 220
C451 180P
C452 180P
C453 0.01
J4
③ L
② A.GND
① R
Z
TO AF ASS'Y
CN4
(To page 51)

VOLUME DRIVE ASS'Y



ASS'Y ONLY FOR
VOLUME MECHANISM

5.3 SPECIFICATIONS

Amplifier Section

Rated output	
20 Hz – 20 kHz, 0.01 % 10 kΩ	7 V
Total harmonic distortion	
20 Hz – 20 kHz, 1 V 10 kΩ	0.002 %
Input terminals (sensitivity/impedance)	
PHONO MM	2.5 mV/50 kΩ
PHONO MC	250 μV/100 Ω
CD, TUNER, TAPE PLAY, LINE	150 mV/50 kΩ
Output terminals (output level/output impedance)	
TAPE REC	150 mV/2.2 kΩ
PRE OUT	1 V/1 kΩ
Frequency response	
PHONO MM 20 Hz – 20 kHz	±0.2 dB
PHONO MC 20 Hz – 20 kHz	±0.3 dB
CD, TUNER, TAPE PLAY, LINE, 1 Hz – 150 kHz	$^{+0}_{-3}$ dB
Tone control (Volume at –40 dB)	
BASS	±8 dB, 100 Hz
TREBLE	±8 dB, 10 kHz
Filter	
SUBSONIC	17 Hz, –12 dB/oct
MUTING	–∞
SN ratio (short-circuit, A network)	
PHONO MM	93 dB (5 mV)
PHONO MC	76 dB (500 μV)
CD, TUNER, TAPE PLAY, LINE	106 dB

Power section, other

Power requirements	a.c. 240 Volts~, 50/60 Hz
Power consumption	30 W
External dimensions	459 (W) x 417 (D) x 163 (H) mm
Weight	10.1 kg

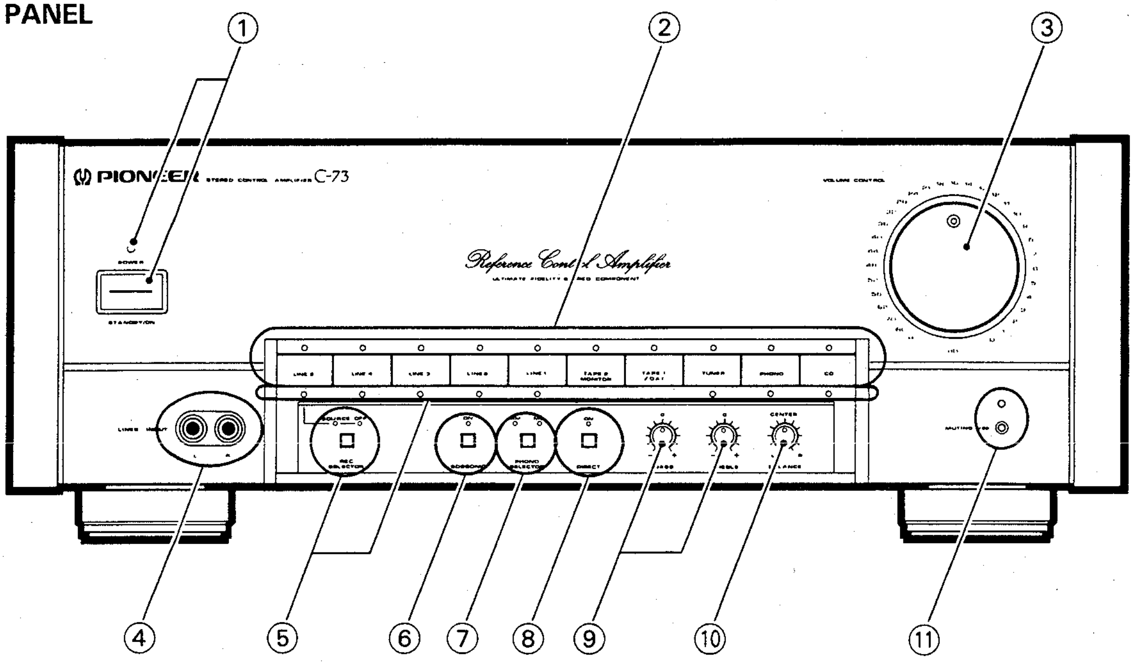
Accessories

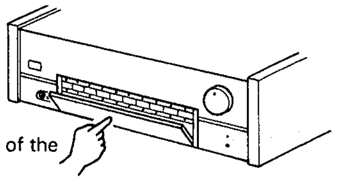
Pin-plug cord	1
Operating Instructions	1
Cushion spacer	2

The specifications and design noted above are subject to change without notice, due to improvements.

5.4 PANEL FACILITIES

FRONT PANEL





Press the center top part of the door to open.

① POWER STANDBY/ON switch/indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.
The POWER indicator is on.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
When the POWER indicator is off, the unit is in STANDBY.

② Input selector buttons/indicators

Use to select the component for playback.

[CD]	For compact disc player.
[PHONO]	For turntable.
[TUNER]	For listening to FM/AM broadcasts with a tuner.
[TAPE 1/ DAT]	To use the cassette deck or DAT connected to the TAPE 1/DAT terminals.
[TAPE 2 MONITOR]	To use the cassette deck, connected to the TAPE 2 MONITOR terminals.
[LINE 1]	For components connected to LINE 1 terminal.
[LINE 2]	For components connected to LINE 2 terminal.
[LINE 3]	For components connected to LINE 3 terminal.
[LINE 4]	For components connected to LINE 4 terminal.
[LINE 5]	For components connected to LINE 5 terminal on front panel.

③ VOLUME CONTROL

Use to adjust the sound volume. At the [– ∞] position, sound will not be heard, while at the [0] position, sound volume will be at its maximum.

④ LINE 5 INPUT terminals

Connect to an audio component's output terminal.

⑤ REC SELECTOR button/indicators

Use to select the playback source component used when performing recording. The audio signals from the select component will be output from the output terminals. When set to SOURCE (SOURCE indicator lights), the signals selected with the input selector switch will be output.

→ OFF → CD → PHONO → TUNER → OFF
SOURCE ← LINE 5 ← LINE 4 ← LINE 3 ← LINE 2 ← LINE 1

⑥ SUBSONIC button/indicator

When the button is pressed to the ON position, the indicator lights and the subsonic filter acts to cut out all frequencies below 17 Hz.

⑦ PHONO SELECTOR button/indicators

Set in accordance with the type of cartridge used on your record player (the corresponding indicator will light).

[MM]: Set here when using a moving magnet cartridge, or a high-output (1 mV or more) moving coil (MC) cartridge.

[MC]: Set here when using a moving coil cartridge.

⑧ DIRECT button/indicator

Use this to listen to the audio signal without routing it through subsonic, tone control (BASS, TREBLE), or balance control circuitry.

NOTE:
When the DIRECT button is in the ON position, the TAPE 2 MONITOR button and SUBSONIC button do not operate.

⑨ Tone controls

[BASS]:	Use to adjust low frequency sounds. The central [0] indicates the standard (flat) position. When the control is rotated to the right, low-frequency sounds are augmented; when rotated to the left, low-frequency sounds are attenuated.
[TREBLE]:	Use to adjust high-frequency sounds. The central [0] indicates the standard (flat) position. When the control is rotated to the right, high-frequency sounds are augmented; when rotated to the left, high-frequency sounds are attenuated.

⑩ BALANCE control

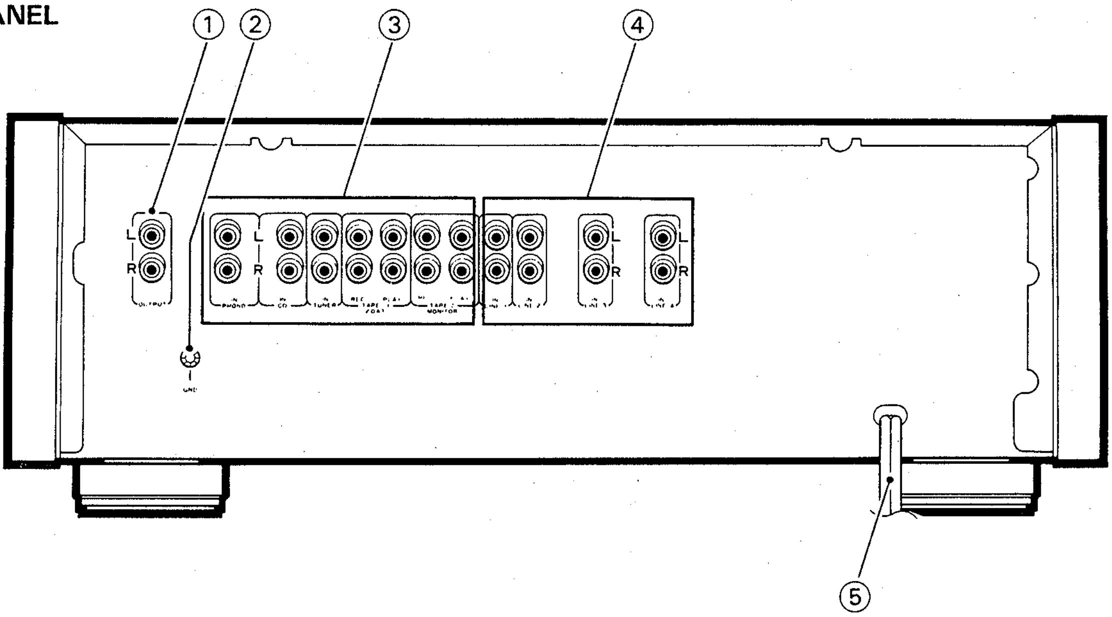
Normally leave in the center position. Use to adjust the balance of sound from right and left channels.

⑪ MUTING button/indicator

Use to temporarily cut the sound. The muting function is on when the MUTING indicator lights. Press the button again to turn the muting function off and return the sound volume to the normal level (the indicator goes out).

NOTE:
When listening at high volume levels, even if you switch MUTING ON, you will still hear a faint sound.

REAR PANEL



① OUTPUT terminals

Connect to the power amplifier input terminals.
Adjust the output level of the signal with this unit's VOLUME CONTROL. When using with a power amplifier or surround processor without volume control capability, connect to this terminal.

② Ground (GND) terminal

Connect to the ground terminal of your turntable.

③ Audio components terminals

[PHONO]	:	Turntable.
[CD]	:	Compact disc player.
[TUNER]	:	FM/AM Tuner.
[TAPE 1/DAT]	:	Cassette deck 1 (first deck) or DAT.
PLAY	:	For playback (connect to the tape deck's PLAY terminals).
REC	:	For recording (connect to the tape deck's REC terminals).
[TAPE 2 MONITOR]	:	Cassette deck 2 (second deck).
PLAY	:	For playback. Connect to the cassette deck PLAY terminal.
REC	:	For recording. Connect to the cassette deck REC terminal.

④ LINE 1-4 input terminals

Connect to an audio component's output terminal.

⑤ Power cord

Connect to a household wall outlet, or the power outlet of an audio timer.

6. FOR C-73/HB TYPE

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

CONTRAST OF MISCELLANEOUS PARTS

The C-73/HB type is the same as the C-73/HEZ type with the exception of the following sections.

Mark	Symbol & Description	Parts No.		Remarks
		C-73/HEZ type	C-73/HB type	
⚠	AC POWER CORD	ADG1036	ADG1041	
⚠	FU1 FUSE (T500mA)	AEK-401	AEK-505	
	OPERATING INSTRUCTIONS (ENGLISH/GERMAN/ FRENCH/ITALIAN/DUTCH/ SWEDISH/SPANISH/ PORTUGUESE)	ARE1167	----------	
	OPERATING INSTRUCTIONS (ENGLISH)	----------	ARB1270	

7. IC INFORMATION

• PD5139A

TERMINAL FUNCTION

No.	Terminal name	I/O	P type	Function	Active
1	Vcc	–	–	+5V power supply	
2	GND	–	–	A/D, D/A analog GND	
3	Vref	–	–	A/D, D/A reference voltage	
4	R-SEL-OFF	O	AD	REC-SELECTOR ON/OFF	H:OFF
5	OPT2	O	N	MM/MC Switching	H:MC
6	MM/MC	O	N	MM/MC Switching (LED Drive)	H:MM
7	LOUD	O	N	LOUDNESS ON/OFF (Not used: GND)	H:OFF
8	SUBSONIC	O	N	SUBSONIC ON/OFF	H:OFF
9	DIRECT	O	N	DIRECT ON/OFF	H:OFF
10	V-ADPT	O	N	VIDEO ADPT. ON/OFF (Not used: GND)	H:OFF
11	A-ADPT	O	N	AUDIO ADPT. (TAPE2/MONITOR) ON/OFF	H:OFF
12	SR-REM	I	C	SR Remote control input	SR
13	CE2	O	N	PD0012A CE_2 (Not used: GND)	L:ON
14	CE1	O	N	PD0012A CE_1	L:ON
15	CE0	O	N	PD0012A CE_0	L:ON
16	DATA	O	N	PD0012A DATA	
17	CLK	O	N	PD0012A CLK	
18	V-FUNC0	O	N	VIDEO FUNCTION control (0)*1	H/L
19	V-FUNC1	O	N	VIDEO FUNCTION control (1)*1	H/L
20	V-FUNC2	O	N	VIDEO FUNCTION control (2)*1	H/L
21	V-FUNC3	O	N	VIDEO FUNCTION control (3) (Not used : GND)	H/L
22	V-ASS'Y-ON/OFF	O	N	VIDEO ASS'Y LOCAL $\overline{\text{ON}}$/OFF*1	L:ON
23	INT2	I	C	For SILENT operation. POWER ON signal	L:ON
24	Vol-UP	O	N	VOLUME UP output (electrically activated)	H:UP
25	Vol-DOWN	O	N	VOLUME DOWN output (electrically activated)	H:DOWN
26	$\overline{\text{INT1}}$	I	C	For SILENT operation. POWER OFF signal	L:OFF
27	GND	–	–	0V	
28	$\overline{\text{RESET}}$	I	–	$\overline{\text{RESET}}$ input. 0V: reset at 2 μs and plus.	L:Reset
29	Xin	I	–	The 4.19MHz ceramic resonator is connected between terminals.	
30	Xout	O			
31	NC	O	C	TIMING CLOCK output (Not used: NC)	
32	Vss	–	–	0V	
33	KEYin7	I	C	Key matrix input	L:Key ON
34	KEYin6	I	C	Key matrix input	L:Key ON

No.	Terminal name	I/O	P type	Function	Active
35	KEYin5	I	C	Key matrix input	L:Key ON
36	KEYin4	I	C	Key matrix input	L:Key ON
37	KEYin3	I	C	Key matrix input	L:Key ON
38	KEYin2	I	C	Key matrix input	L:Key ON
39	KEYin1	I	C	Key matrix input	L:Key ON
40	KEYin0	I	C	Key matrix input	L:Key ON
41	V-R-SEL2	O	N	VIDEO REC-SEL control (2)*1	H/L
42	V-R-SEL1	O	N	VIDEO REC-SEL control (1)*1	H/L
43	V-R-SEL0	O	N	VIDEO REC-SEL control (0)*1	H/L
44	POWER-ON/OFF	O	N	AC primary side ON/OFF	H:OFF
45	SP-B	O	N	SPEAKER B ON/OFF (Not used: GND)	H:OFF
46	SP-A	O	N	SPEAKER A ON/OFF (Not used: GND)	H:OFF
47	FUNC-LD	O	N	FUNCTION [LD] : AUDIO control*2	L:Selects
48	FUNC-CD	O	N	FUNCTION [CD] : AUDIO control*2	L:Selects
49	V-IND-V2	O	N	FUNCTION [VIDEO2] : VIDEO-IND (Not used: GND)	L:Lights
50	V-IND-V1	O	N	FUNCTION [VIDEO] : VIDEO-IND*2	L:Lights
51	V-IND-VTR3	O	N	FUNCTION [VCR3] : VIDEO-IND (Not used: GND)	L:Lights
52	V-IND-VTR2	O	N	FUNCTION [VCR2] : VIDEO-IND*2	L:Lights
53	V-IND-VTR1	O	N	FUNCTION [VCR1] : VIDEO-IND*2	L:Lights
54	V-IND-TV	O	N	FUNCTION [TV] : VIDEO-IND*2	L:Lights
55	V-IND-LD	O	N	FUNCTION [LD] : VIDEO-IND*2	L:Lights
56	REC-MUTE	O	N	REC MUTE CONTROL	L:ON
57	MUTE-IND	O	C	MUTE IND	L:Lights
58	MUTE-CONT	O	C	MUTE CONTROL	H:ON
59	J.KU/HE.HB	O	C	Destination switching strobe OUT*3	L:OUT
60	KEYout4	O	C	Key strobe OUT4	L:OUT
61	KEYout3	O	C	Key strobe OUT3	L:OUT
62	KEYout2	O	C	Key strobe OUT2	L:OUT
63	KEYout1	O	C	Key strobe OUT1	L:OUT
64	KEYout0	O	C	Key strobe OUT0	L:OUT

P type (Port type)

C:	CMOS input or CMOS output
N:	Nch open drain output
AN:	8-bit A/D analog input

VIDEO Function Control

Pin 18	Pin 19	Pin 20	Pin 21	Function
H	H	H	L	TV
L	H	H	L	LD
H	L	H	L	VIDEO
L	L	H	L	VCR1
H	H	L	L	VCR2

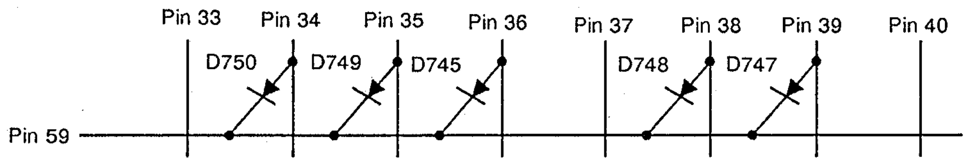
VIDEO REC-SEL Control

Pin 43	Pin 42	Pin 41	Function
H	H	H	TV
L	H	H	LD
H	L	H	VIDEO
L	L	H	VCR1
H	H	L	VCR2

*1: Used only for C-72.
*2: Function names are different between C-72 and C-73 as follows. The names shown in above tables are in accordance with C-72.

Functions of C-72	Functions of C-73
CD	CD
PHONO	PHONO
TUNER	TUNER
TAPE1/DAT	TAPE1/DAT
TAPE2/MONITOR	TAPE2/MONITOR
LD	LINE1
TV/AUX	LINE2
VCR1	LINE3
VCR2	LINE4
VIDEO	LINE5

*3: Diode matrix



By connecting (C) or disconnecting (NC) D745 and D747-D750, switching of below-mentioned optional functions is available.

D750: Destination switching
(C): For destinations corresponding to only AUDIO functions (C-73/HEZ and HB types.)
(NC): For destinations corresponding to AUDIO/VIDEO functions (C-70/J, C-72/KU/CA and SD types).
D749 and D745: Switching of AUDIO functions, and switching of common functions to AUDIO/VIDEO.

Type	D749	D745	CD	PHONO	TUNER	TAPE1	LINE 1 LD	LINE 2 TV	LINE 3 VCR1	LINE 4 VCR2	LINE5 VIDEO
C-72/KU/CA and SD types	C	NC	**1	**1	**1	**1	5	6	7,8	9	10
C-73/HEZ and HB types	NC	C	1	2	3	4	5	6	7	8	9

Note: Figures in the tables show the cyclic order.

**1: D747 and D748: Switching of AUDIO functions (Available only for destinations corresponding to AUDIO/VIDEO).

D748	D747	CD	PHONO	TUNER	TAPE1
C	C	1	2	3	4

Note: Figures in the tables show the cyclic order.

• PD0012A (IC702)

No.	Terminal name	I/O	P type	Function	Active
1	DATA	–	–	DATA input	
2	$\overline{\text{CLK}}$	–	–	CLOCK input	
3	$\overline{\text{CEO}}$	–	–	CHIP ENABLE input	
4	FUNC PHONO	O	N	FUNCTION [PHONO] : AUDIO control*1	L:Selects
5	FUNC TUNER	O	N	FUNCTION [TUNER] : AUDIO control*1	L:Selects
6	FUNC DAT1	O	N	FUNCTION [DAT-1] : AUDIO control (Not used: GND)	L:Selects
7	FUNC DAT2	O	N	FUNCTION [DAT-2] : AUDIO control (Not used: GND)	L:Selects
8	FUNC TAPE	O	N	FUNCTION [TAPE1] : AUDIO control*1	L:Selects
9	GND	–	–	GND	
10	FUNC AUX1	O	N	FUNCTION [AUX-1] : AUDIO control (Not used: GND)	L:Selects
11	FUNC TV	O	N	FUNCTION [TV] : AUDIO control*1	L:Selects
12	FUNC VTR1	O	N	FUNCTION [VCR-1] : AUDIO control*1	L:Selects
13	FUNC VTR2	O	N	FUNCTION [VCR-2] : AUDIO control*1	L:Selects
14	FUNC VTR3	O	N	FUNCTION [VCR-3] : AUDIO control (Not used: GND)	L:Selects
15	FUNC V1	O	N	FUNCTION [VIDEO] : AUDIO control*1	L:Selects
16	FUNC V2	O	N	FUNCTION [VIDEO2] : AUDIO control (Not used: GND)	L:Selects
17	$\overline{\text{RESET}}$	–	–	RESET input	
18	+5V	–	–	+5V power supply	

NOTE: For P type (Port type), refer to PD5139A.
*1: Refer to *2 of PD5139A.

• PD0012A (IC703)

No.	Terminal name	I/O	P type	Function	Active
1	DATA	–	–	DATA input	
2	$\overline{\text{CLK}}$	–	–	CLOCK input	
3	$\overline{\text{CE1}}$	–	–	CHIP ENABLE input	
4	R-SEL PHONO	O	N	REC-SEL [PHONO] : AUDIO control[*1]	L:Selects
5	R-SEL CD	O	N	REC-SEL [CD] : AUDIO control[*1]	L:Selects
6	R-SEL TUNER	O	N	REC-SEL [TUNER] : AUDIO control[*1]	L:Selects
7	R-SEL DAT1	O	N	REC-SEL [DAT-1] : AUDIO control (Not used: GND)	L:Selects
8	R-SEL TAPE	O	N	REC-SEL [TAPE1] : AUDIO control[*1]	L:Selects
9	GND	–	–	GND	
10	R-SEL LD	O	N	REC-SEL [LD] : AUDIO control[*1]	L:Selects
11	R-SEL TV	O	N	REC-SEL [TV] : AUDIO control[*1]	L:Selects
12	R-SEL VTR1	O	N	REC-SEL [VCR-1] : AUDIO control[*1]	L:Selects
13	R-SEL VTR2	O	N	REC-SEL [VCR-2] : AUDIO control[*1]	L:Selects
14	R-SEL V1	O	N	REC-SEL [VIDEO] : AUDIO control[*1]	L:Selects
15	R-SEL OFF	O	N	REC-SEL [OFF] IND	L:Selects
16	R-SEL SOURCE	O	N	REC-SEL [SOURCE] control	L:Selects
17	$\overline{\text{RESET}}$	–	–	RESET input	
18	+5V	–	–	+5V power supply	

NOTE: For P type (Port type), refer to PD5139A.
*1: Refer to *2 of PD5139A.